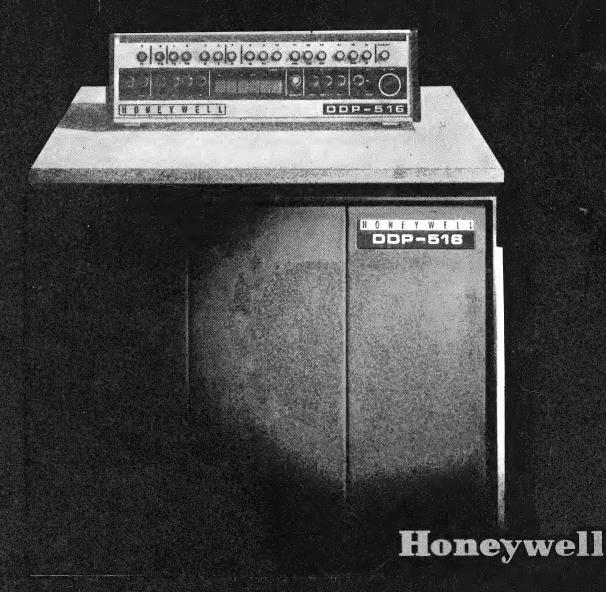
Instruction Manual Volume 3



 μ -COMP DDP-516 general purpose I/C digital computer

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Doc. No. 130071622D

M-968

Instruction Manual

DDP-516 GENERAL PURPOSE COMPUTER

Volume III

DRAWINGS

January 1969

Honeywell

Original printing Sept. 1966
Revised Feb. 1967, July and August 1968, and January 1969
Reprinted September 1968, and January 1969

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NOTE

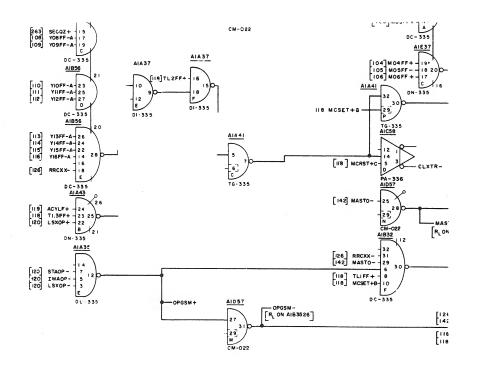
This manual includes drawings revised in accordance with ECO 3255, 3467, 3686, 3704, 3718, 3767, 3839, 3990, 4084, 4131, 4172, 4217, 4226, 4286, 4350, 4483, 4464, 4763, 4895, 5170, 5641, 5724, 5776, 5906, and 6154.

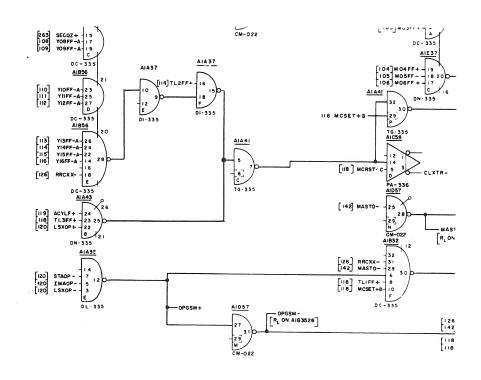
HONEYWELL LIMITED, COMPUTER CONTROL DIVISION

Instruction Manual Vol III DDP-516 General Purpose Computer Doc.No. 130071622D M968 Please note the following printing error on LBD No. 0.128, Page 29

LBD No. 0.128 READS

LBD No. 0.128 SHOULD READ





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FOREWORD

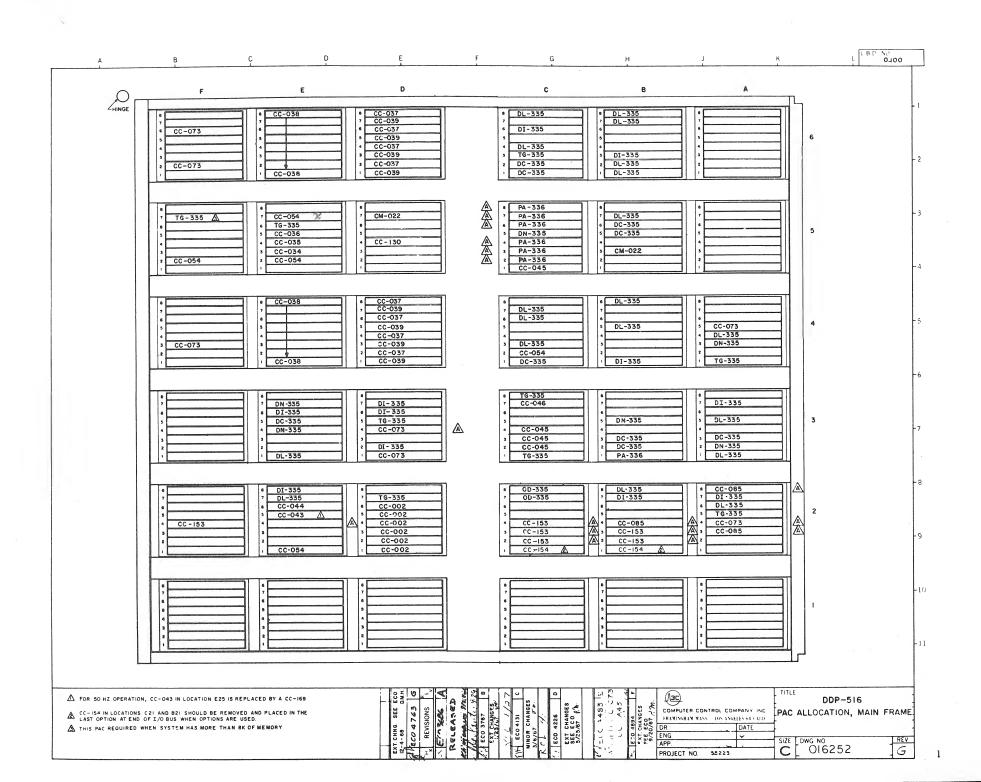
This volume contains electrical and mechanical reference drawings for the DDP-516 General Purpose Computer. Mechanical drawings follow the logic drawings. The logic drawings are arranged according to the LBD numbers that appear in the upper right-hand corner of each drawing. System cabling information, cable routing diagrams, the main frame PAC location diagram, and the main frame and option cabinet coding diagrams follow the logic diagrams.

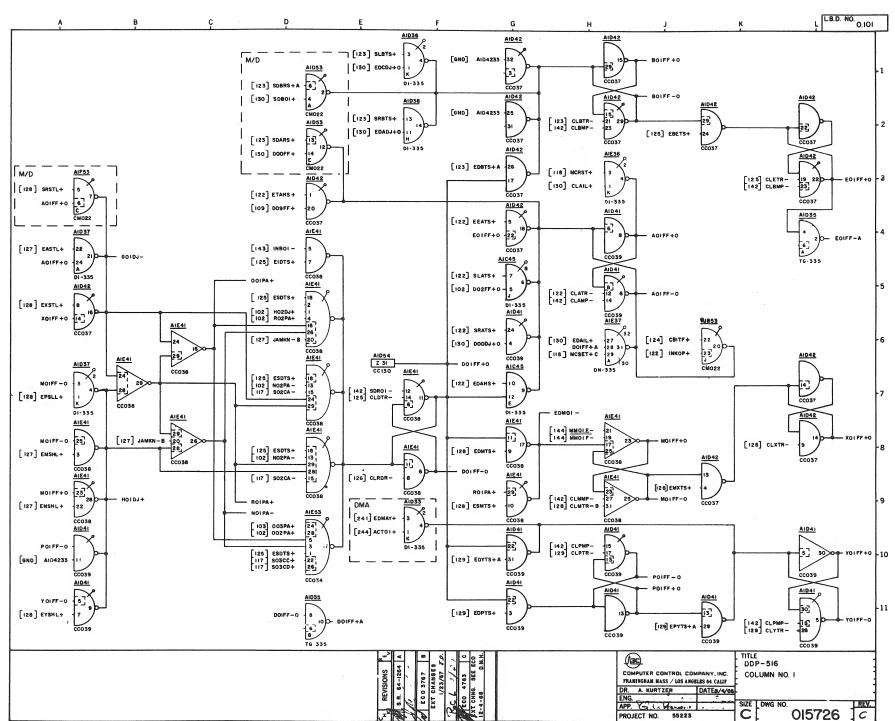
The origins of input signals are shown at their destinations on the logic drawings. For example, the input signal EASTL+ on LBD number 0.101, coordinates A4, is preceded by [127], the LBD number of the logic drawing on which the signal originates.

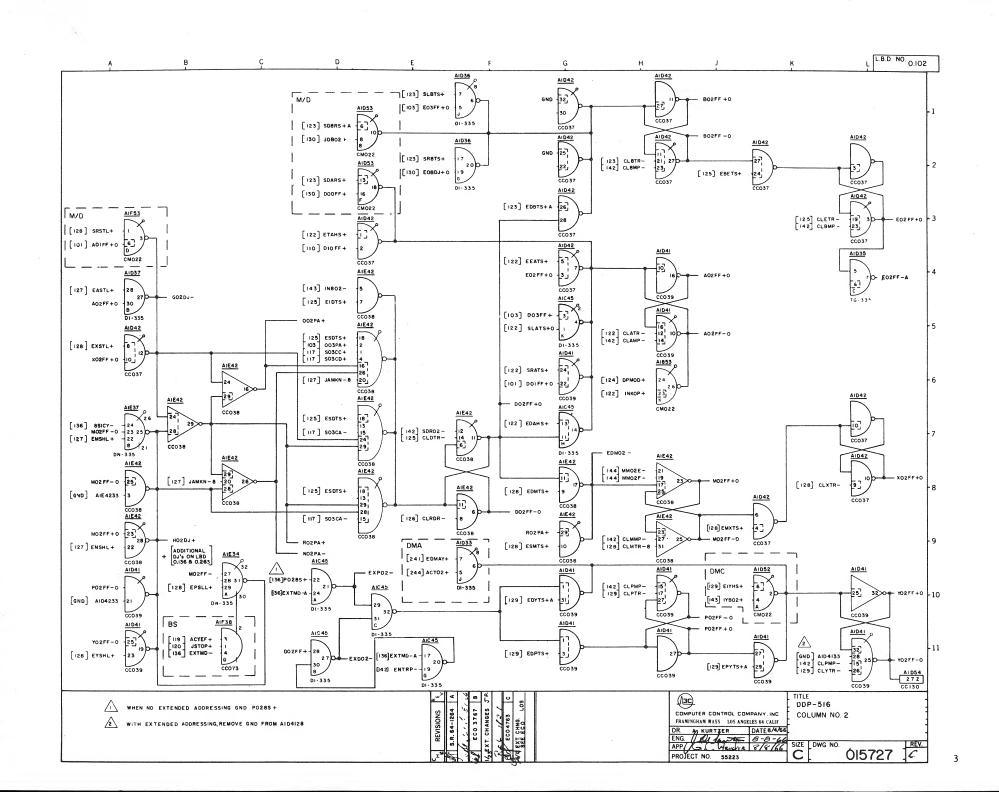
Volume I contains maintenance data and the theory of operation of the Computer Control Processing unit, Memory, and the standard Input/Output interface equipment. The drawings contained in this Volume (III) are referenced throughout Volume I.

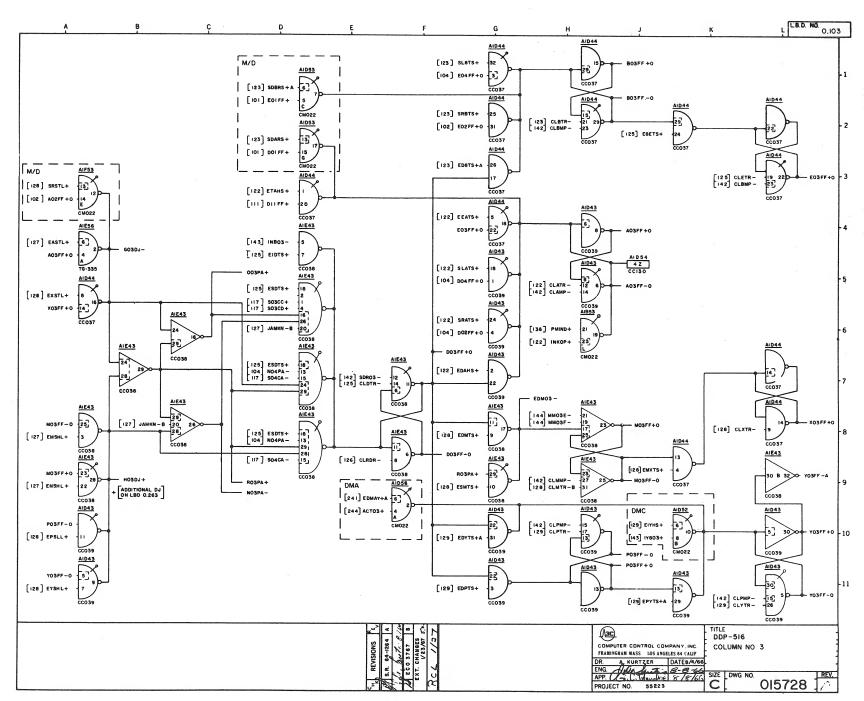
Volume II contains the flow charts and instruction analyses of all DDP-516 instructions (except for those that apply to specific options, such as the High Speed Arithmetic Unit). Volume II also contains the function index, which lists the signal mnemonics in alphanumerical sequence. Their definitions, and source are also included.

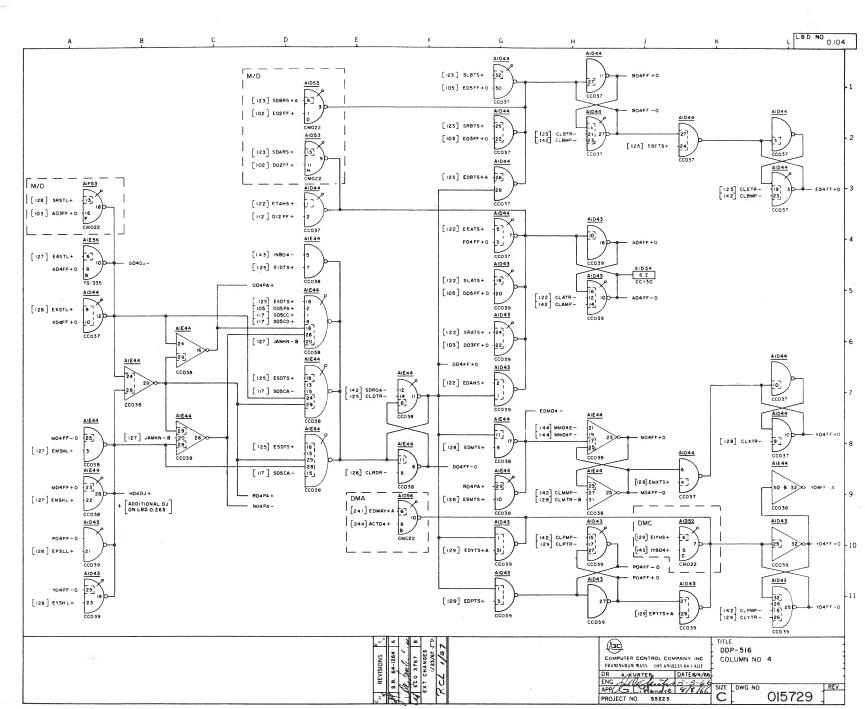
The reader should take note of areas on the LBDs which are within dashed lines, such as the gate on LBD 0.101, A3. The dashed-line areas contain logic used for certain options. This logic is present only when the computer is equipped with the option noted within the dashed line area. An example is the High Speed Arithmetic Unit.

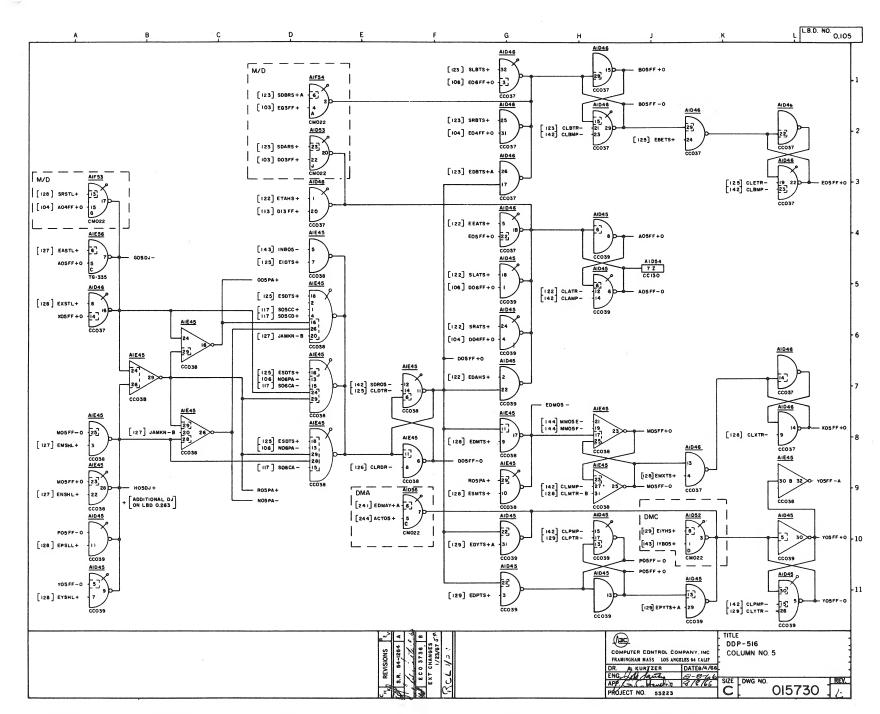


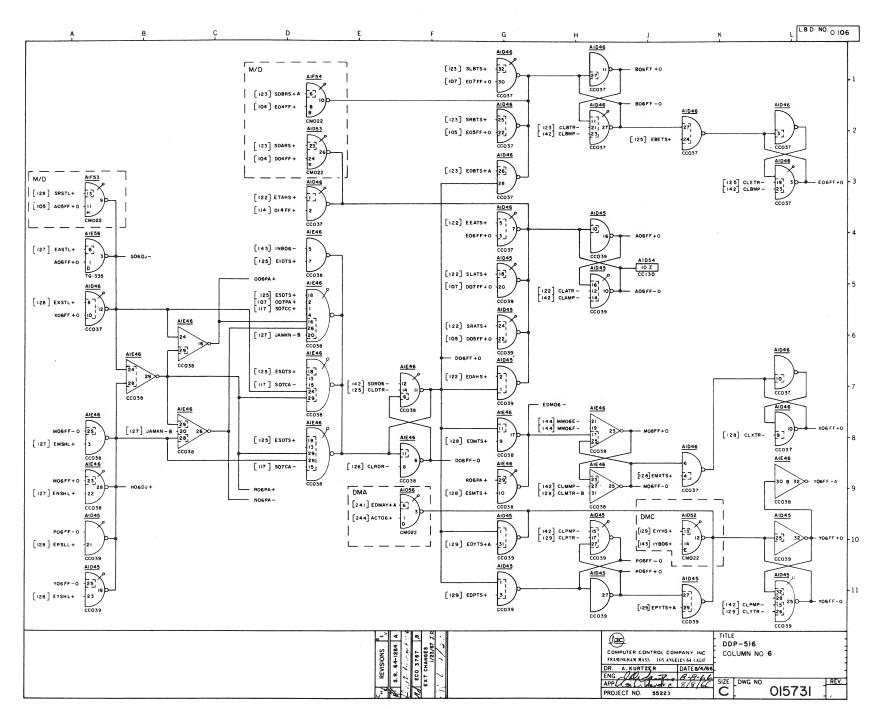


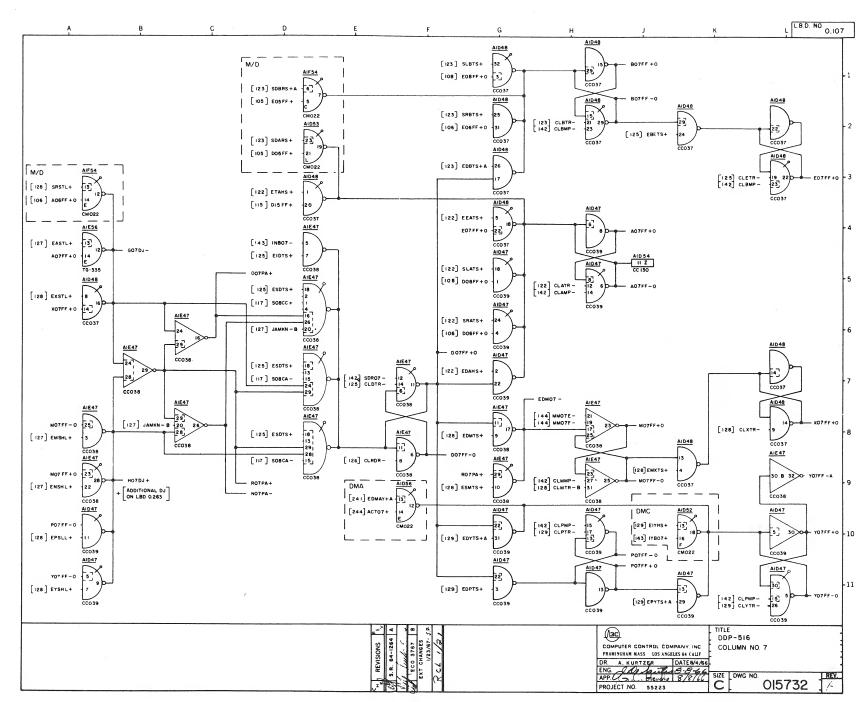


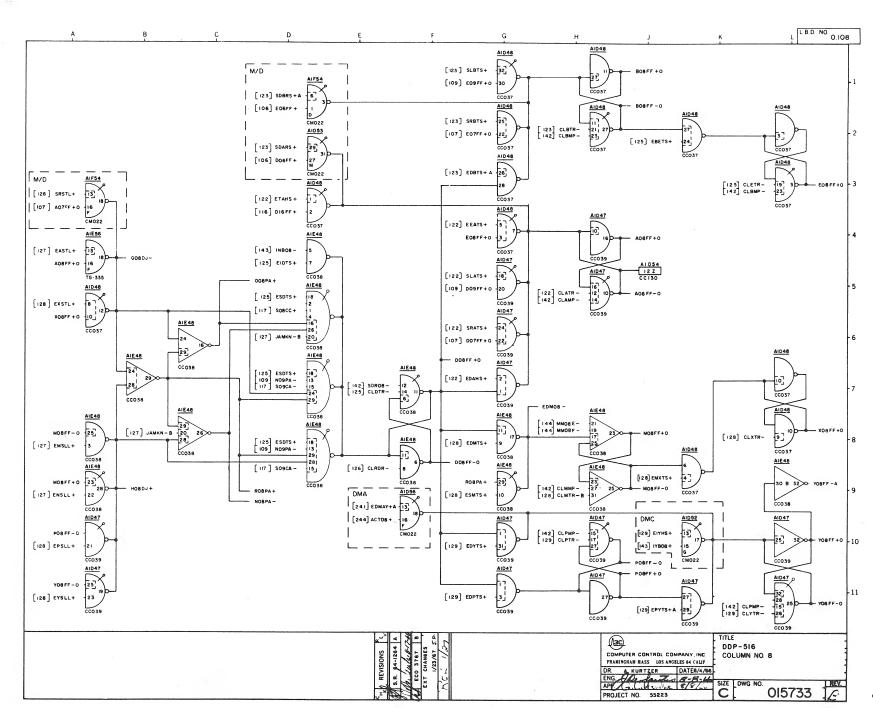


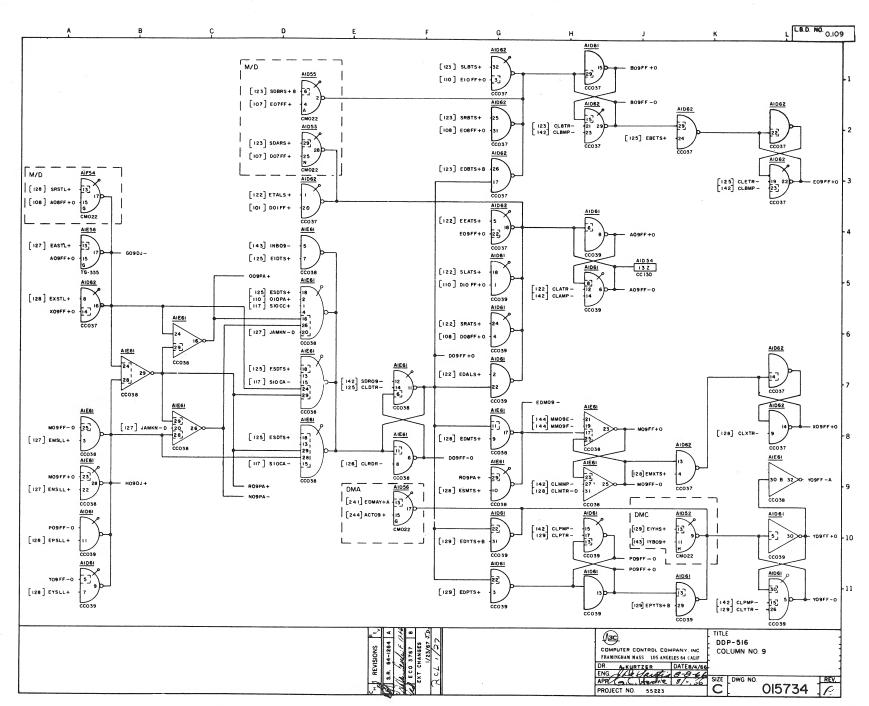


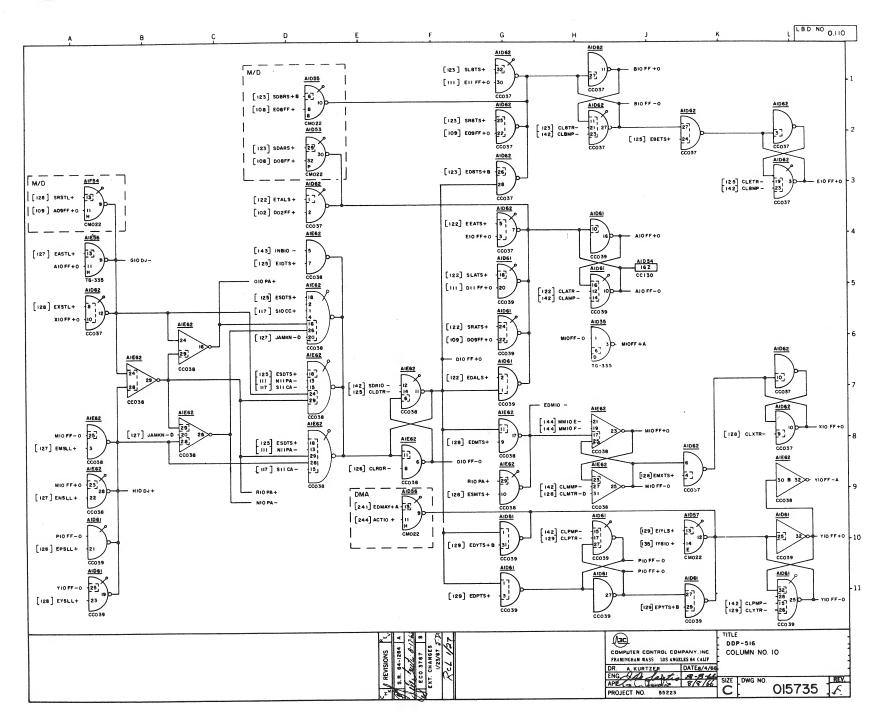


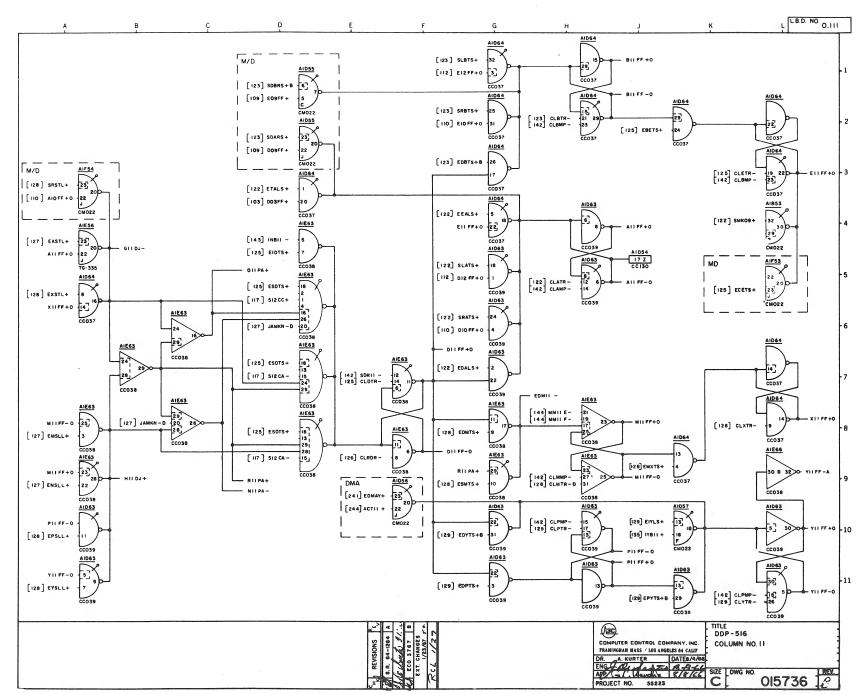


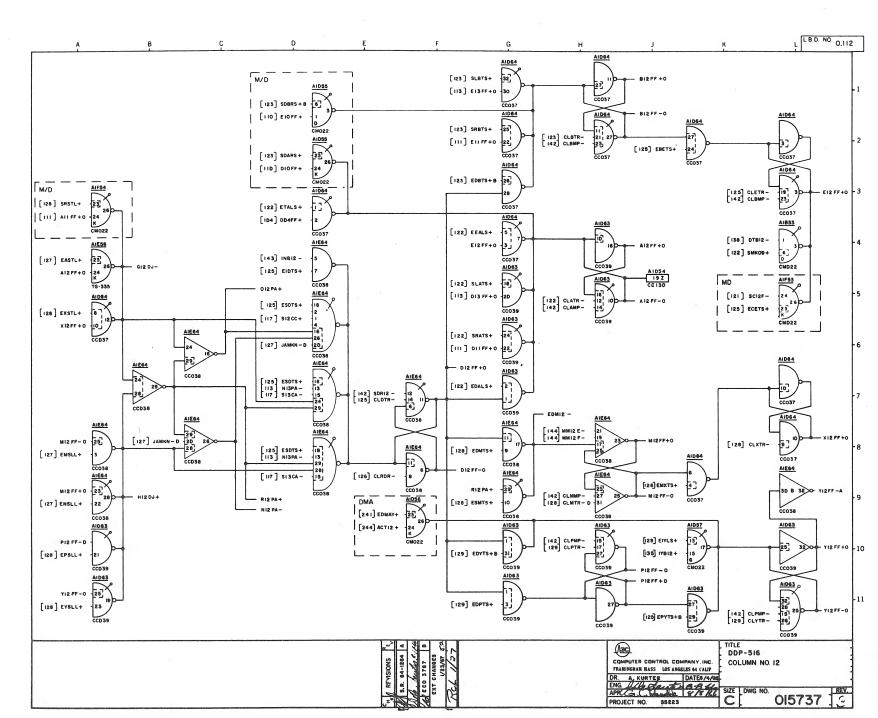


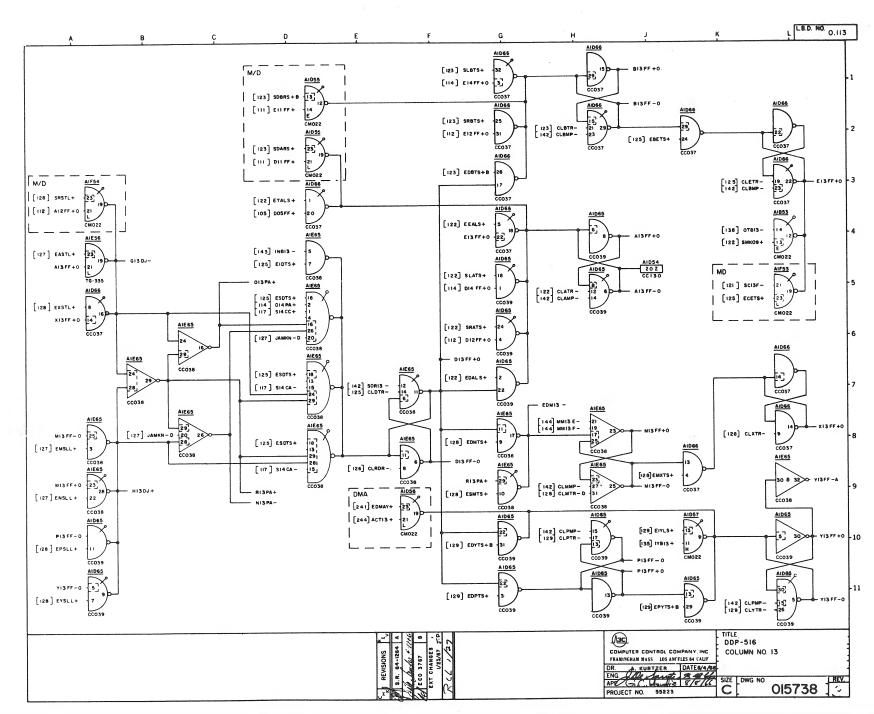


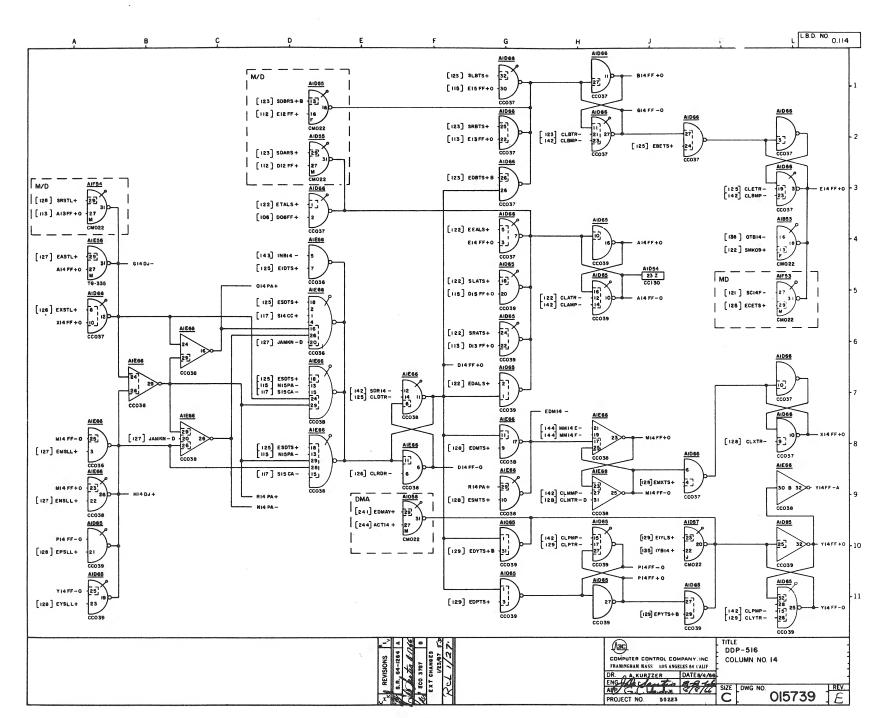


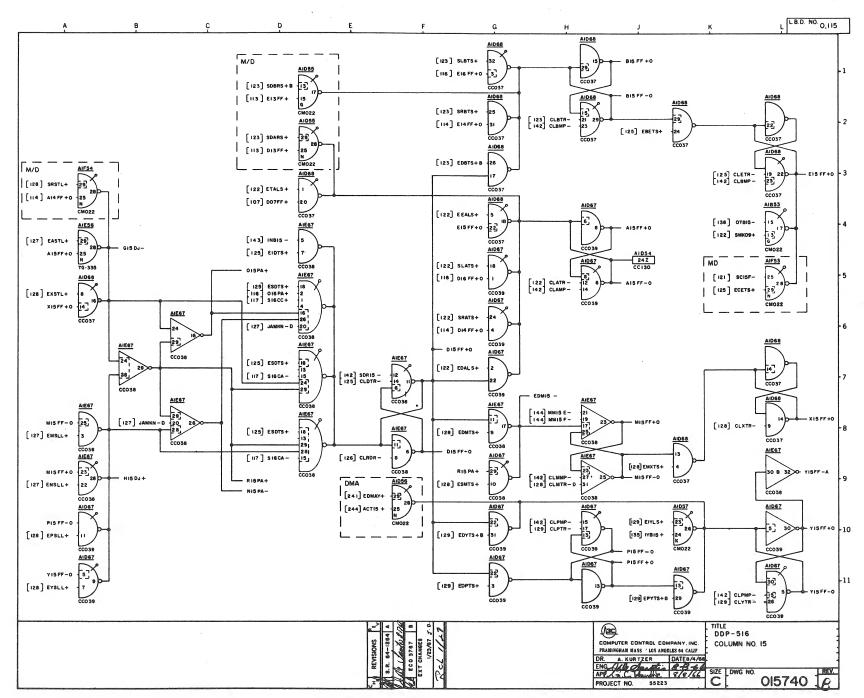


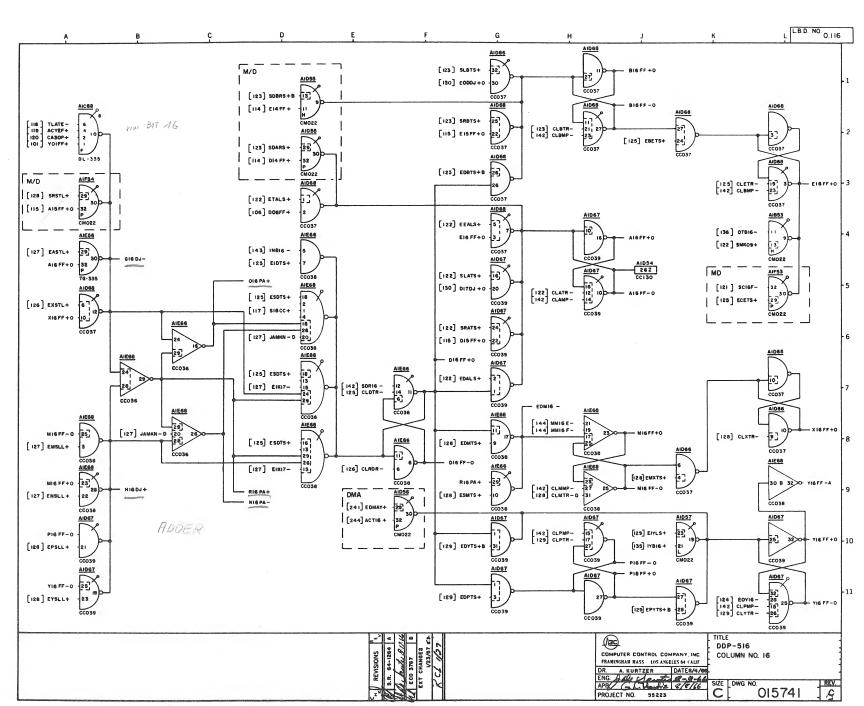


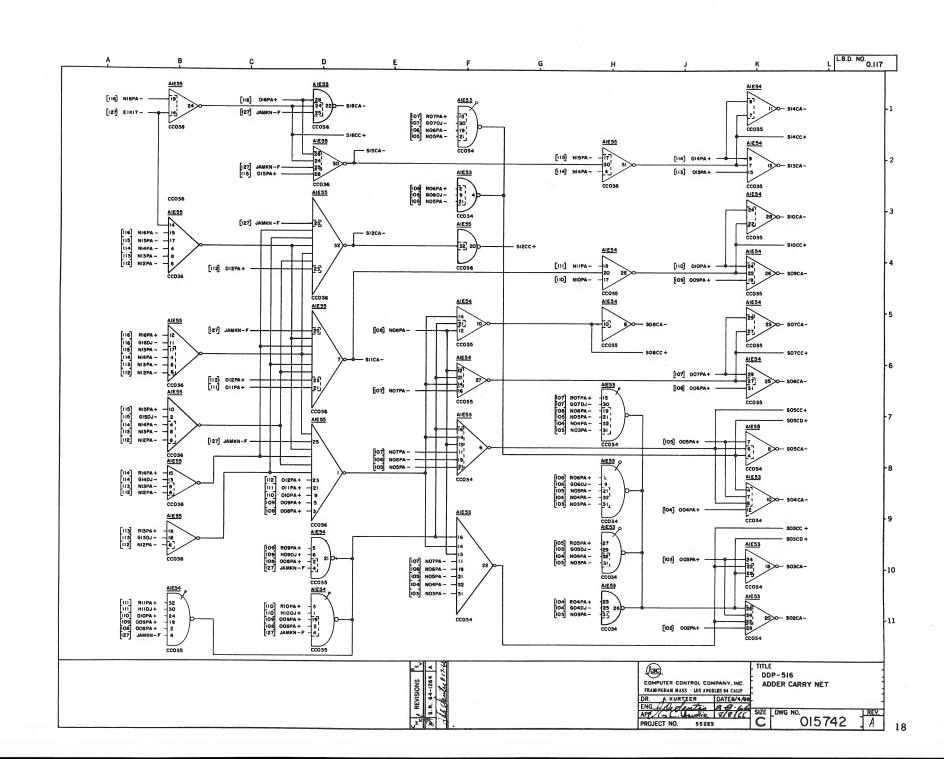


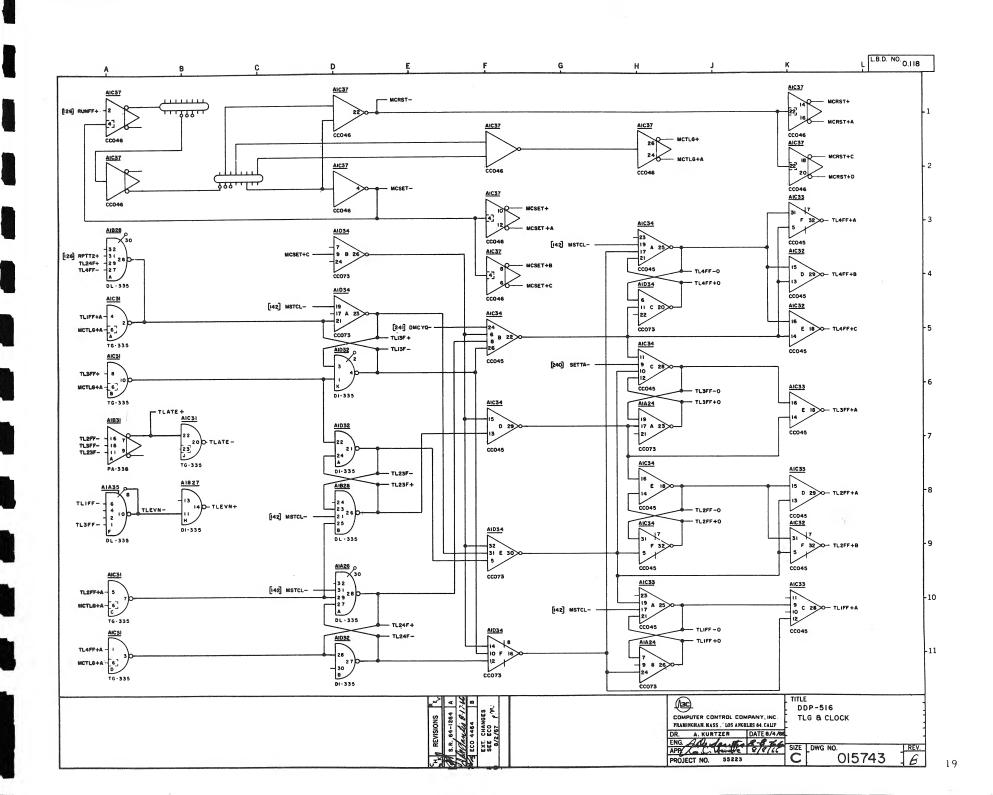


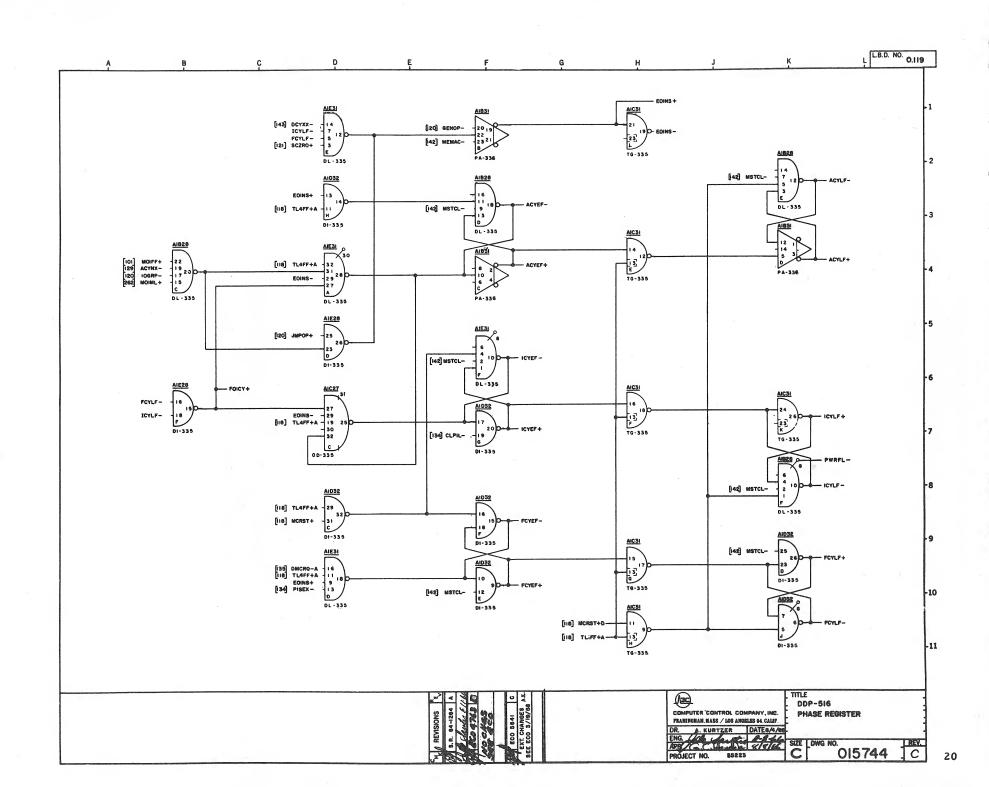


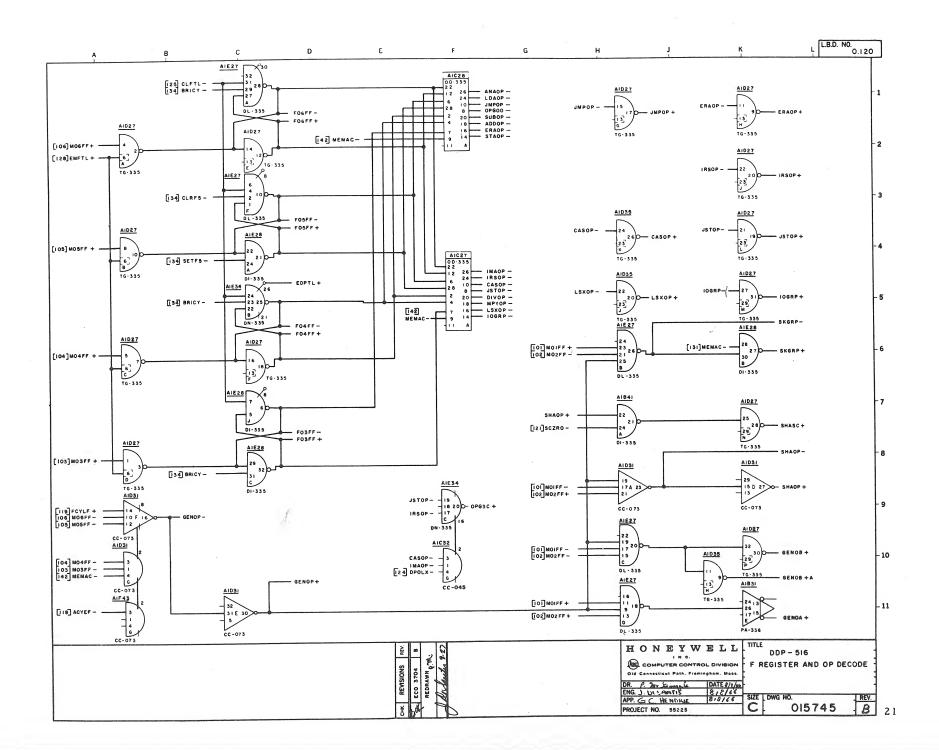


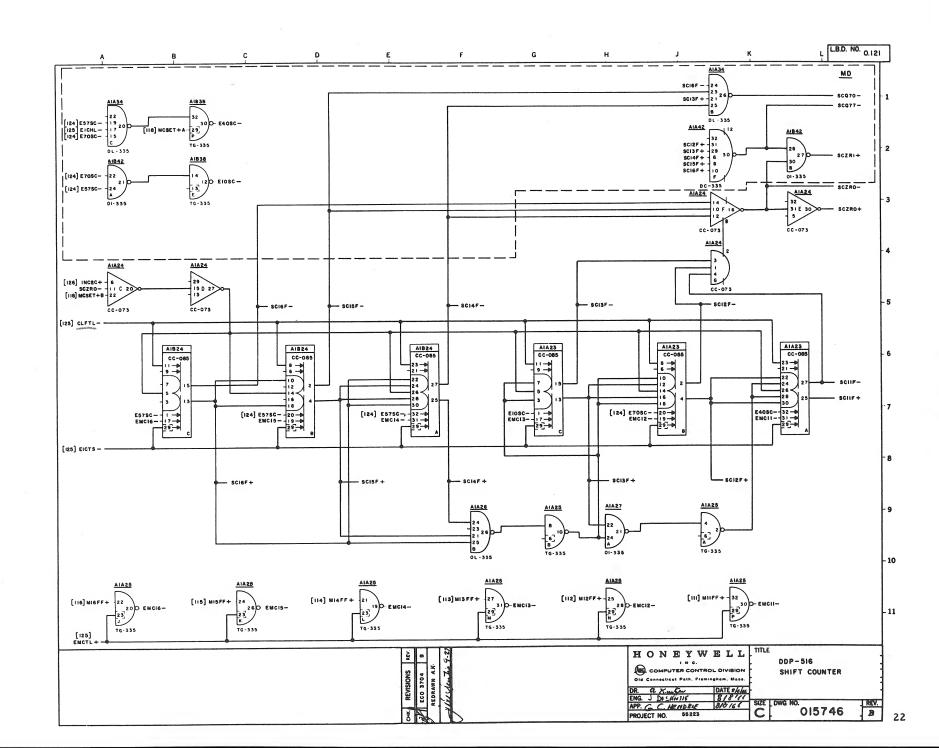


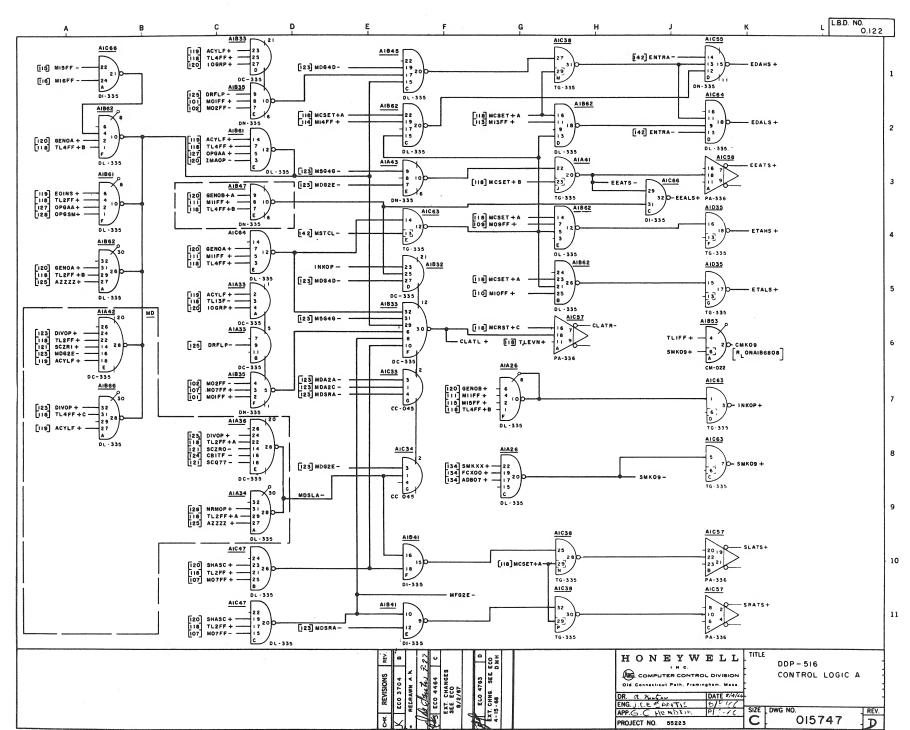


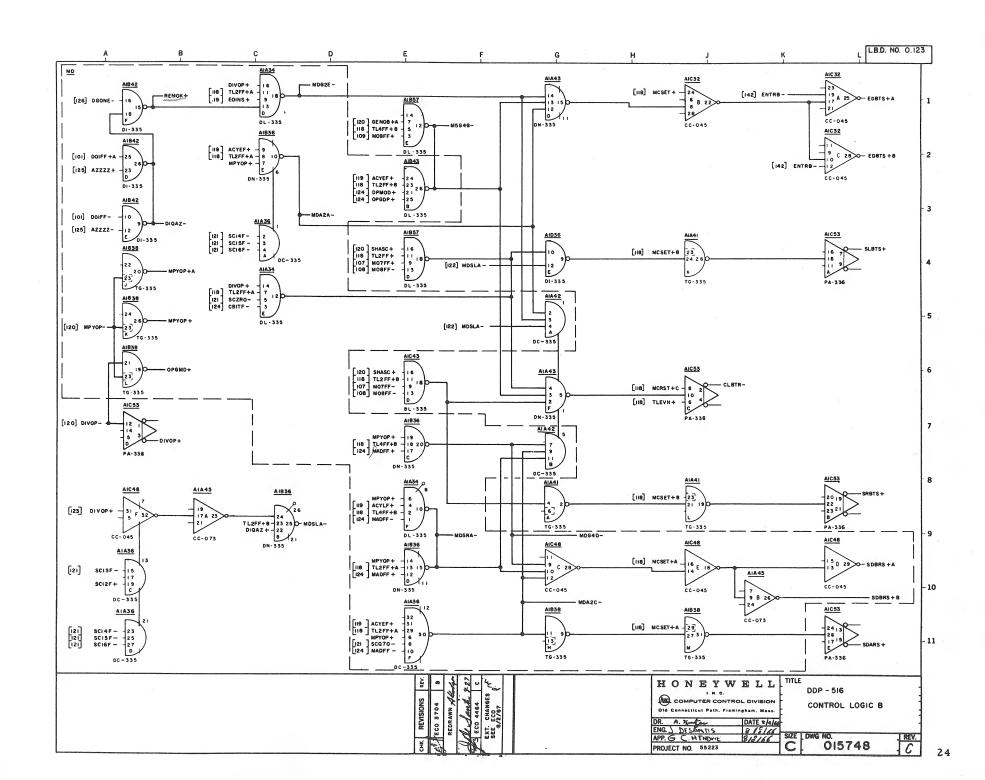


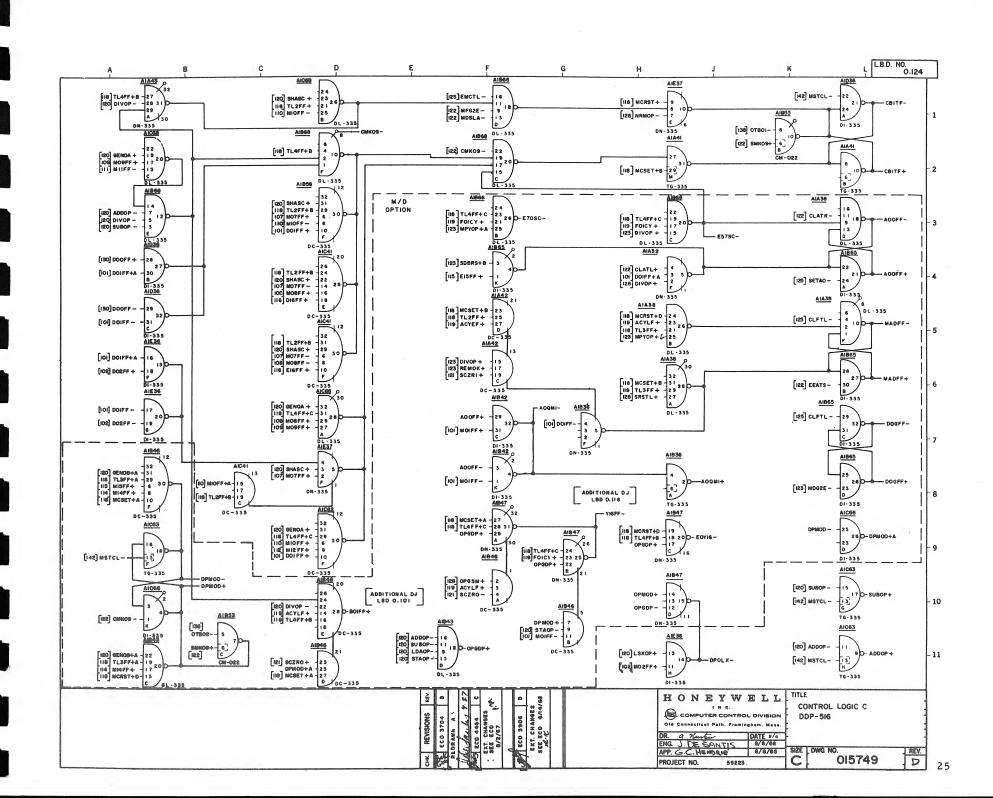


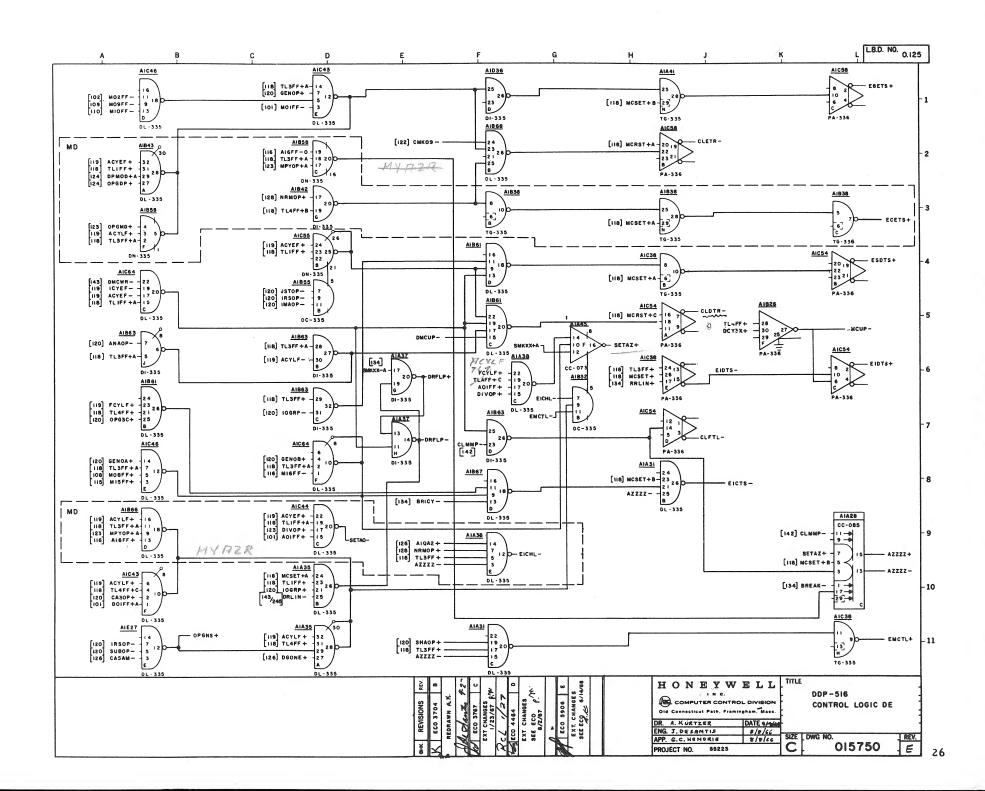


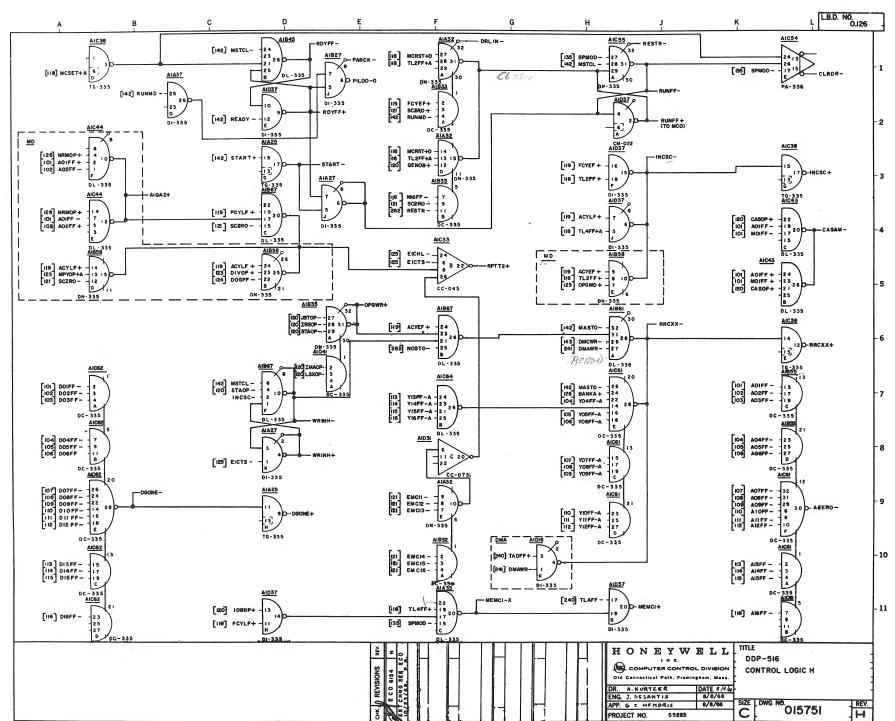


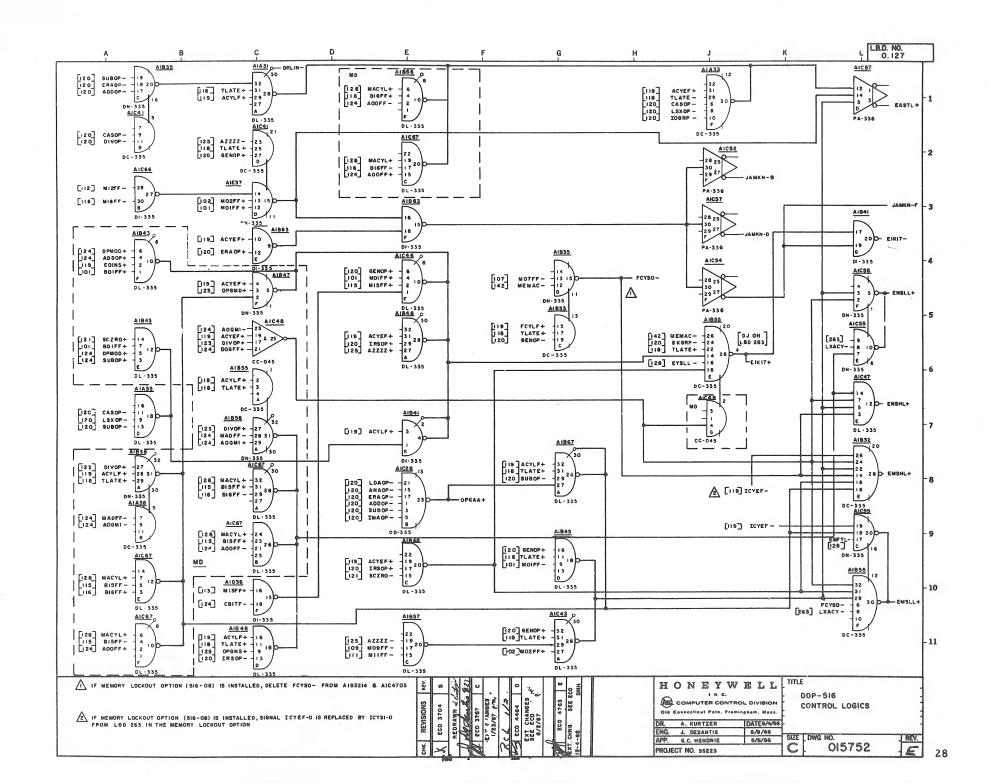


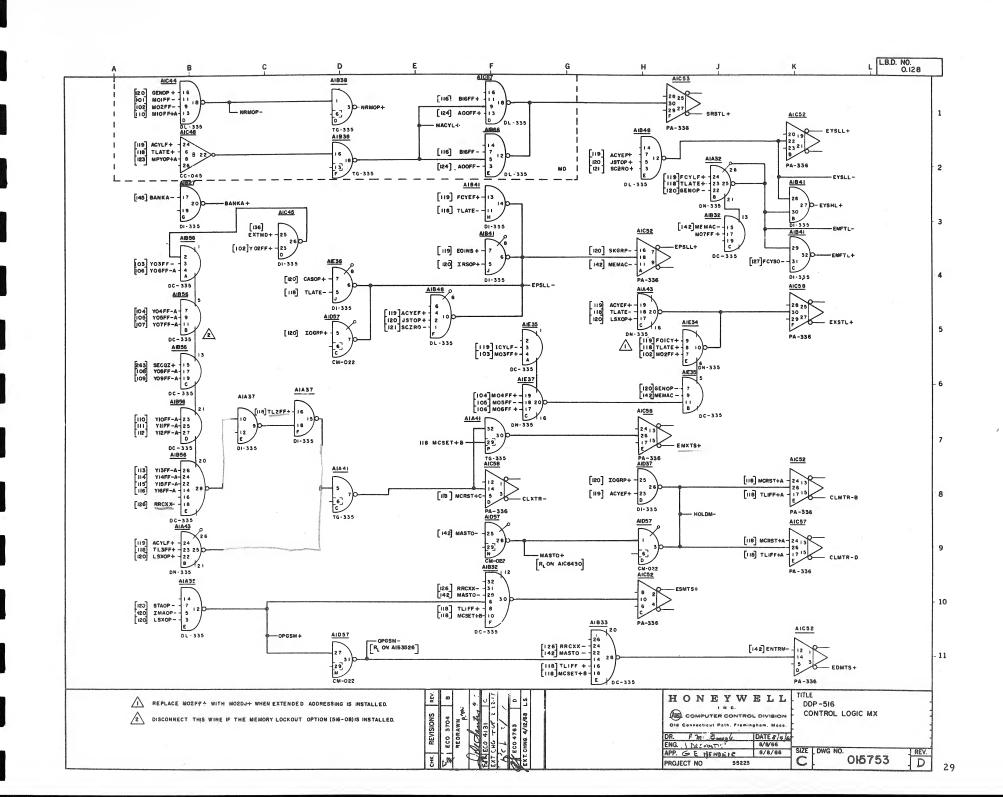


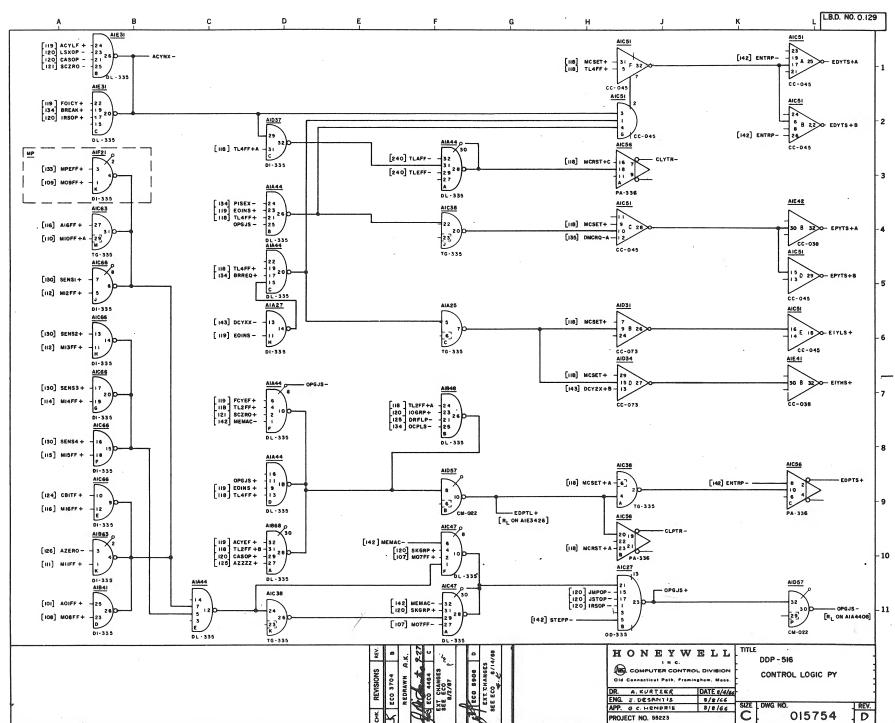


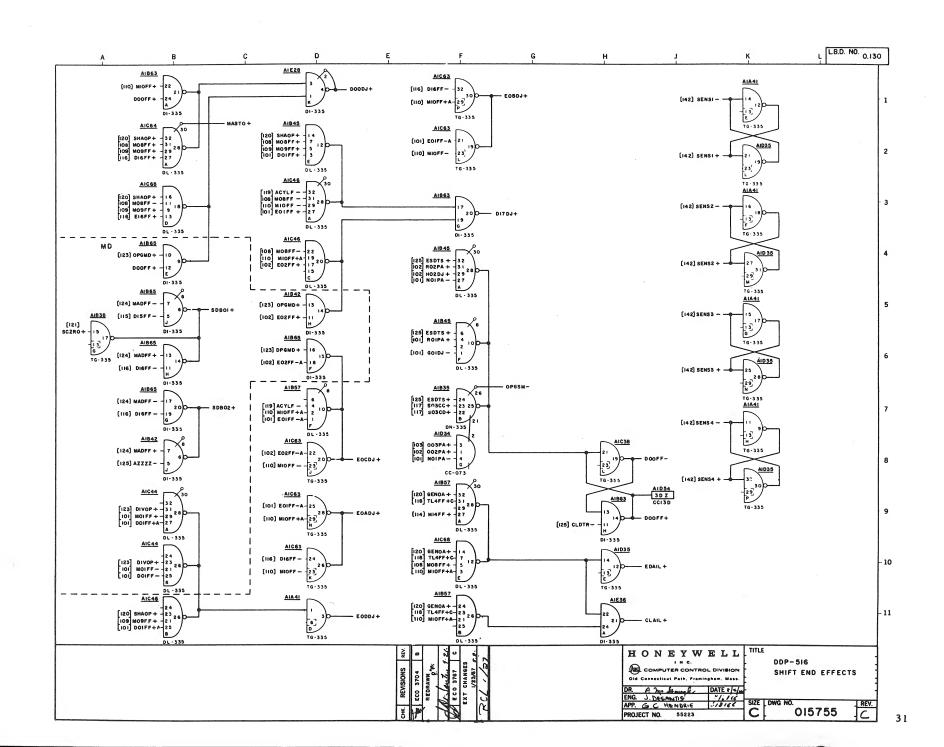


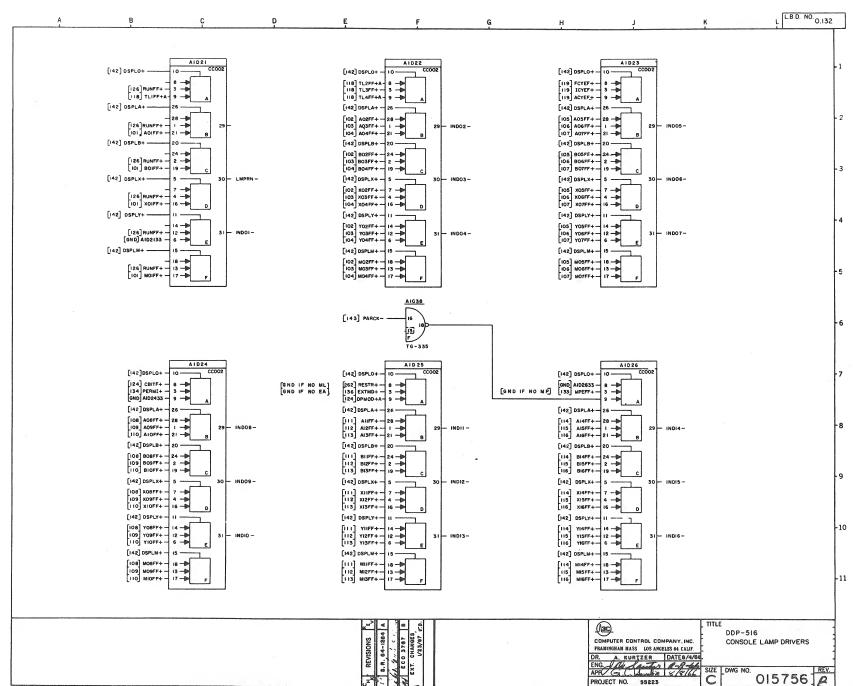


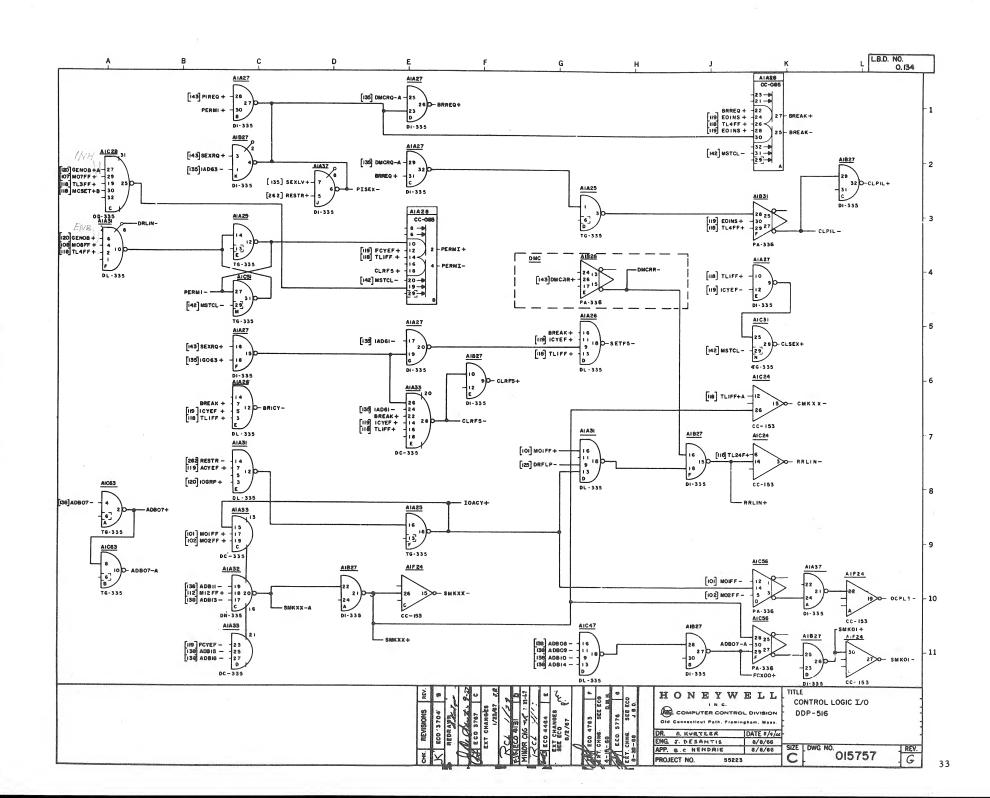


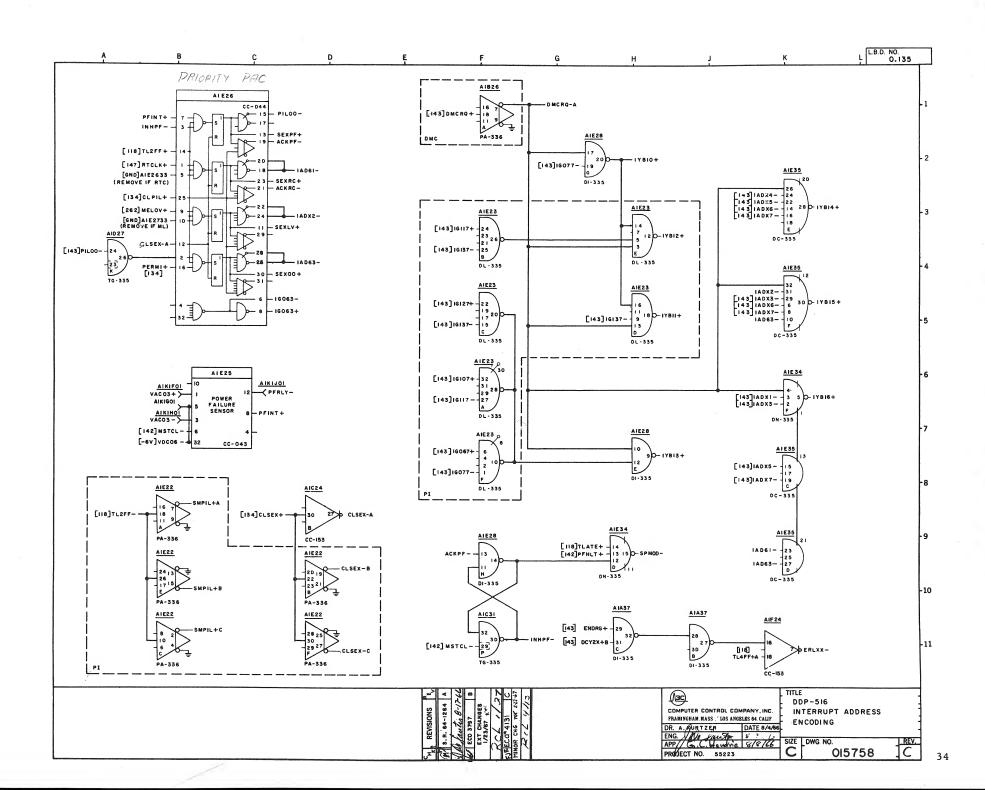


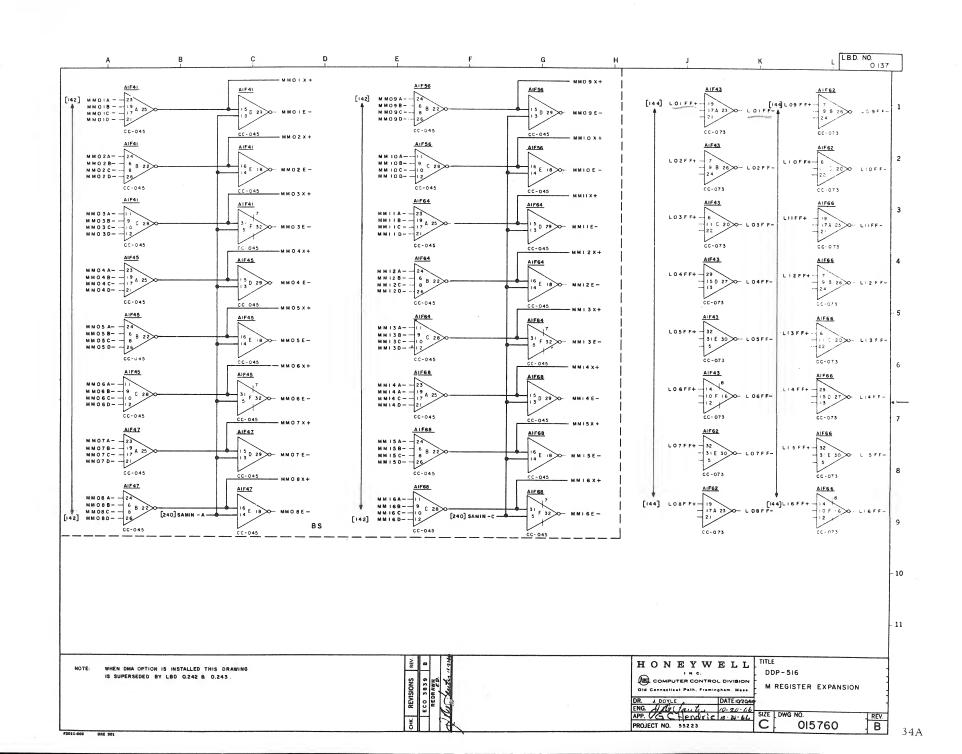




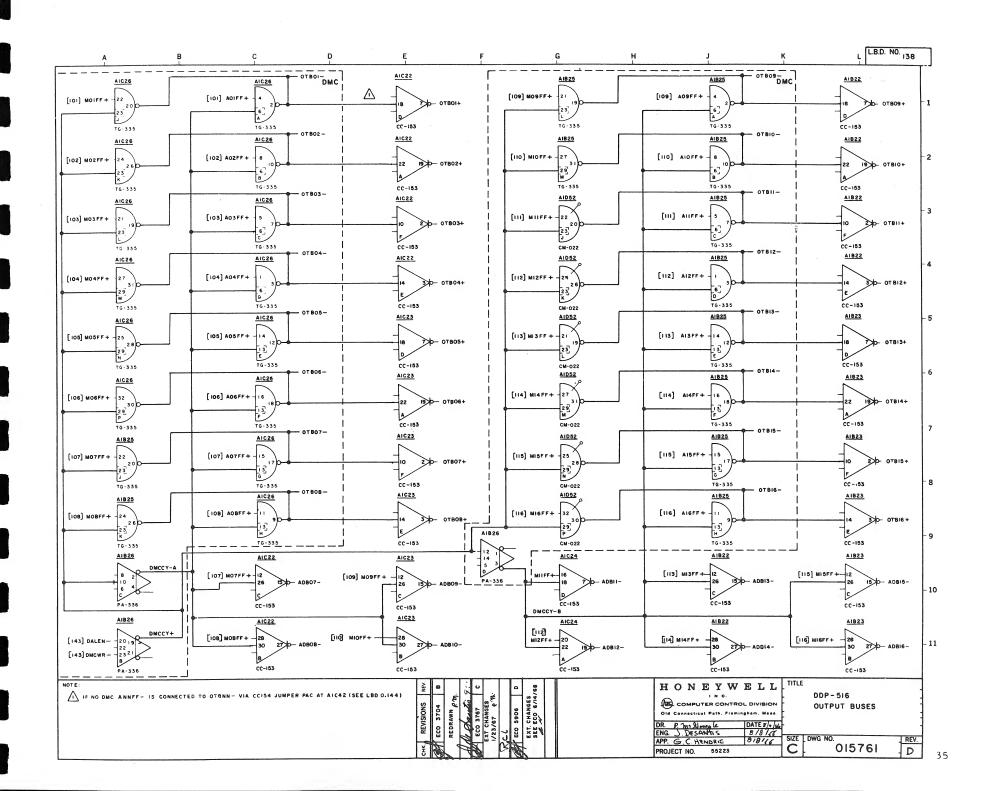




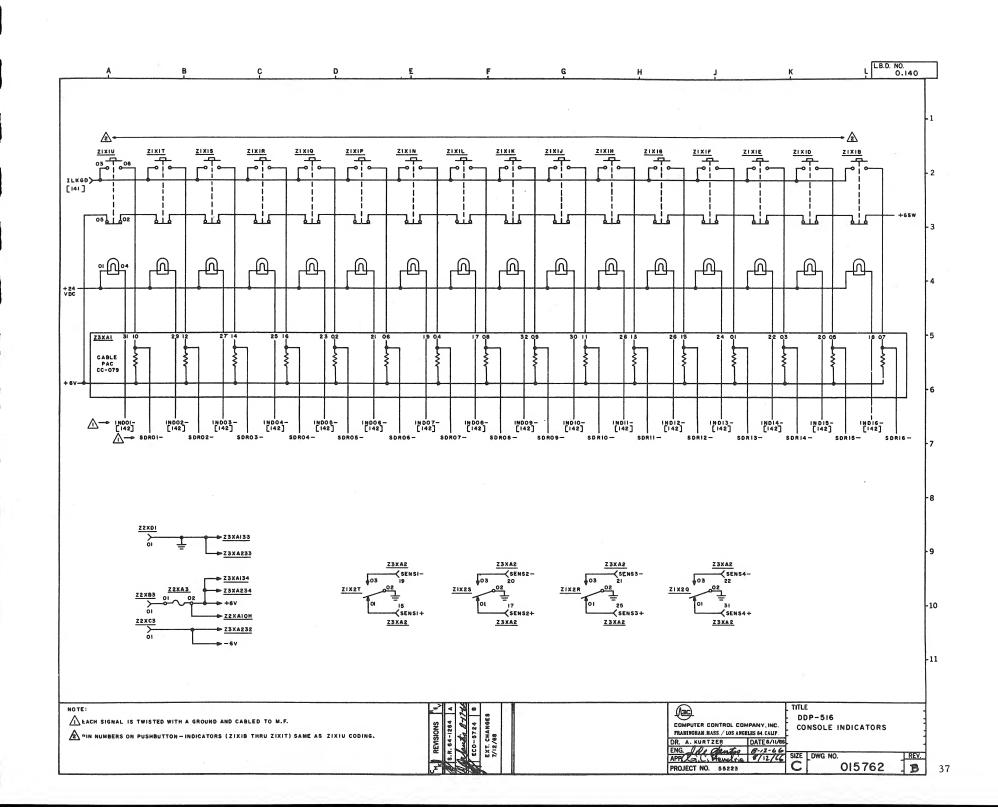


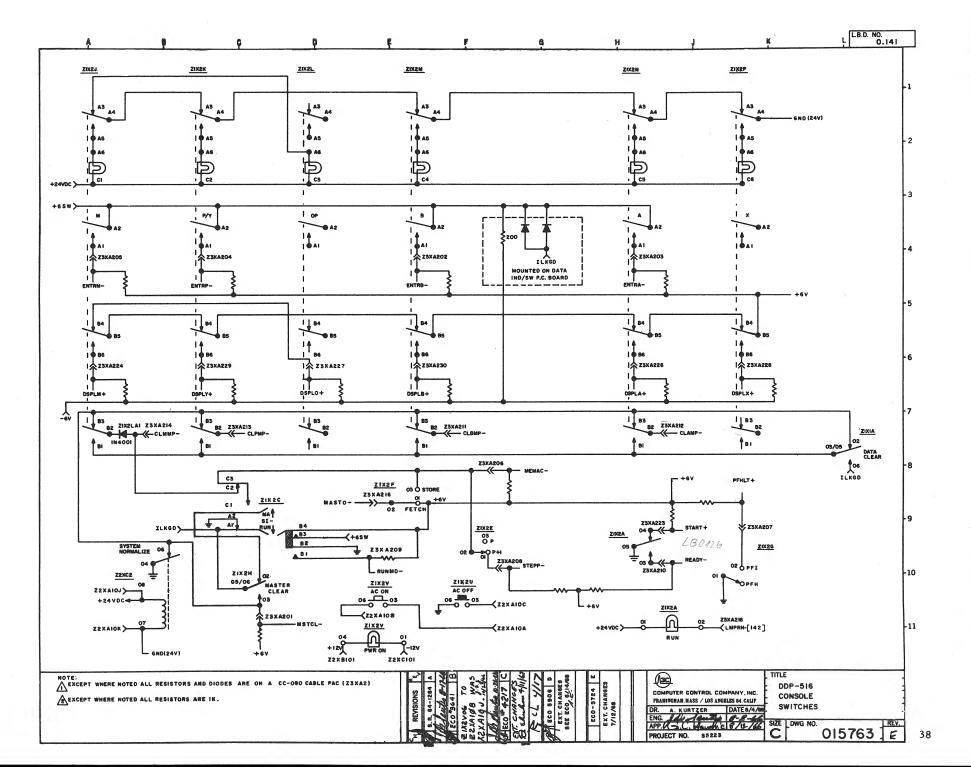


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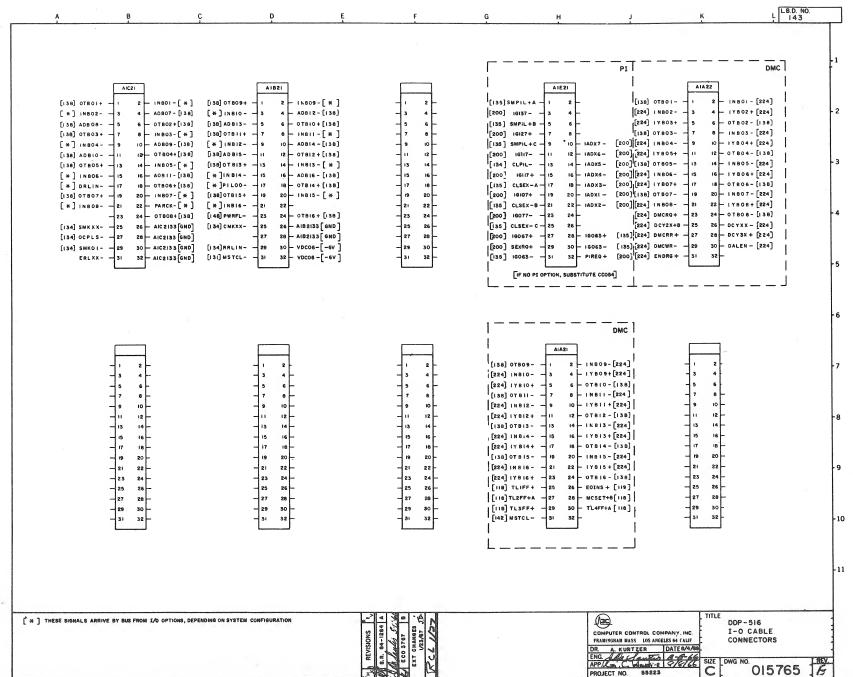


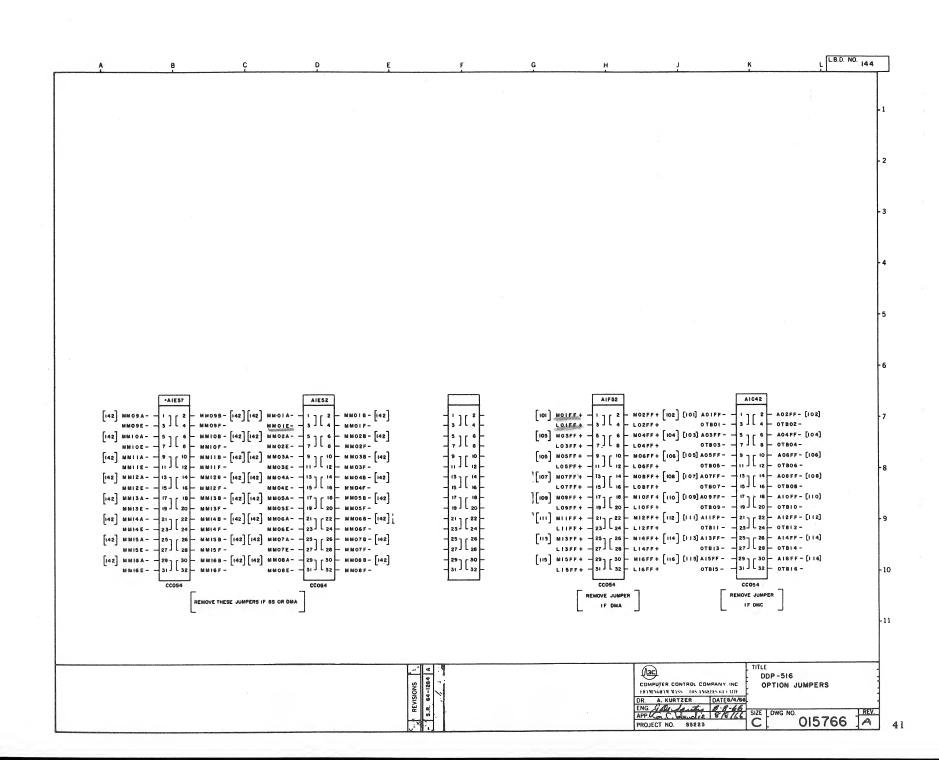
	А В	ç	D		E F	G		K L LB.D. NO.	o
TL4	MEMCI [FOGRE] EUTS [457+RRS-HMA+CAS+LDX] ETDS [Mev] ETDS [Mev] CLPTS,EDPTS [EO-14ME] CLPTS,EDPTS [EO-14ME] CLPTS,EDPTS [EO-14ME] CLPTS,EDPTS [EO-14ME] CLPTS,EDPTS [EO-16ME] STYLE [FOT-15MEC]	SETPI [MOB] (SFFECTIVE AT MEXT TLI) CLATR, EEATS, CLBTR, EDBTS [MOS] CLETR, EEETS [MI] CLATR, EESTS [MI] CLATR, EEPTS [MIZ] CLATR, EPTS [BRREG]	CLAIL [MIC+MIG] EDAL [MOB-MIC+MId] CLATR [MIL+MIS+MIS+MIG] EDANS [MIL-MIS+MIS+MIG] ETANS [MIL-MIS+MIS+MIG] CLATR [MIL-MIS+MIG] SETER [MIL-MIS+MIG] SETER [MIL-MIS+MIG] CLATR. [MIL-MIS+MIG] CLATR. [MIL-MIS+MIG] CLATR. [MIL-MIS+MIG]	CLYTR, EDPTS [SKCON] CLYTR, EPYTS [SKCON-BRREG]	CLYTR, EPYTS [BRREG]	MENCI CLPTR,EDYTS [EQI-JMP] CLYTR,EDYTS [EXTG-TREE] CLYTR,EDYTS [EXTG-TRE-BREAR] STYIE [MOI-DPMODILDA+ADD+SUB]	MEMCI C. ATR. EDMYS. EDM. S. [DM. ANAW. + EDM. + HOD + SUB] SETAR [OAD FOR IADD + SUB + DV] SETAR [CAS-100 + CAS-11 LAS-11 LAS-12 LA	ME MCI CLATR EDANS [LDA+AMA+EDA+MD0+SUB+] EDALS [LDA-MAD0+NV-E CLATR [MA-AMA+EDA+MD0+SUB+] CLATR [MA-MD] CLATR, SONDS [MP-MD] CLATR, SONDS [MP-MD] CLATR, SONDS [MP-MD] CLATR, SONDS [MP-MD] SETOR [CO-POINLAD0+SUB-DN] SETOR [CO-POINLAD0+SUB-DN] SETOR [CO-POINLAD0+SUB-DN] CLYTR, EDYTS [ST-TRS] CLYTR, EDYTS [ST-TRS] CLYTR, EDYTS [ST-TRS]	-1
TL3 (AND TLATE+)	EBRTL, EYSH, EBSLL (GENOF) ESSLL, [GENOF, NO2-LSX] ESSLL, [GENOF, NO2-LSX] ESSLL, ESSNL (GENOF)	EAST, EMBH, EMBL, ENSH, ENSL CLETR, EBETS [MOS+MO] ECH, SETAS [RS-MO(AH-AZ)] ECTS, SETOR [MS-MIS] ECTS, SETAR [RS-MIS] PPTTZ [SCEMO (MRNOS+AH-AZ)]	EASTL, JAMKIN [ĀĒ (MIZ+MIG] EASTL, EMSLL [AZ + MIZ-WIG] ENSHL, EMSLL [AZ + WIZ-WIG] ENTY [ĀZ - AZ -	EPSLL, EIKI7	EASTI, EMSHI, EMSHI, EMSHI, EMSHI, EMSHI, EMSHI, EBETS EMCTI, CI, KTOB, SETAR [RE] RPTTR [SCERO]	EBSHLEMSLL EXSTL [MO2] CLDTR, ESDTS	EAST [ADD-SEB-FEM-CAS-DIV-] SRSTL [WATGE 4 BIT] EPEL [457] EPEL [457] ERSH. [604-ADD-MRY-BE/BE-BE-BT-] ERSH. [104-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE/BE-BT-] ERSH. [504-ND-MRY-BE-BT-] CLOTH [407] STAP [407-DV] CLATR. EMT'S [LSK] CLAMD [407-SET-BT-] CLAMD [407-SET-B	EAST. [ADD-SUB-FERA+CAS+DIV+MPY (BIG # BIT)] SIST. [MPY (BIG * BIT)] EFSL. [RRS+1008P] EVSH., EYELL, EAVA-MAN-REDA-MAN-MISHAN-BISTBR-BIST-HOW-MAD (ADD-MAN)] ERSH., ERSL. [EAN-MAN-REDA-MAN-BISTBR-BIT) + ANN-MED (EAST, ERSL. [EAN-MAN-REDA-MAN)] ERSH., ERSL. [EAN-MAN-REDA-MAN-BISTBR-B	-4
7L2	CLPTR, EDPTS [SCENO · <u>MENUC]</u> CLYTR, EMYTS [RRC(Y-O)] INCSC [SCERO] CLRUM [SCERO · RUMND]	CLRUN [SZERÖ-MB]	СLATR. EDANS, EDALS <u>(\$СВРО)</u>		CLATR, SRATS, CLRCE [SCERO - WO] CLATR, SLATS [SCERO - WO] CLBTR, SLBTS [SCERO - WO - RATE CLBTR, SRBTS [SCERO - WO - RATE CLBTR, SRBTS [SCERO - WO - RATE CLBTR, SRBTS [SCERO - WO] SCREEN [SCERO - WO -		CLYTR.EDTS [ASS A2] ** CLYTR.EASTS STAND [DRANDOLLDA+] CLATR.ESTS STAND [DRANDOLLDA+] CLATR.ESTS STAND [STR+ADD+59JB] CLATR.ESTS STAND [STR+ADD+59JB] CLATR.ESTS [BWY-82TB-52TB-52TB-52TB-52TB-52TB-52TB-52TB-5	EAST. [ADD-SUB-FERA-CAS+OV-MAY (BIS BRT] SIST. [LAPY(BIS-BIT)] EYS. ENSYL, ENCLY, ENCYCLESTOR (BANACHAN-BIT) ENSYL, ENST. [SUB-CASIGN-MAY-MAY BIS (BIS-BIT) + DIV MAZO (AD-MAY) ENSYL, ENST. [SUB-CASIGN-MAY-MAY BIS (BIS-BIT) + DIV MAZO (AD-MAY) ENSYL, ENST. [SUB-CASIGN-MAY-MAY (BIS) - DIV MOS (AD-MAY-MAY) ENSYL CLYTR, EMATS [REAT (MAY-DAY) ENGYL CLYTR, EMATS [REAT (MAY-DAY) CLYTR, EMATS [MAY-DAY) CLYTR, EMATS [MAY-DAY, MAY-DAY, MAY	-6
TLI (AND TLATE—)	EPSLL, EINT CLFTL, CLRSC, CLDTR, ESDTS CLRRE, CLMAD, CLDOG CLSEX RRC [BASTD] CLMTR		,			ENSIN, ENSIN, ENT. * CLMTN 20—F [PREMA: JAGGS - SEXRG-16005] 24—F [PREMA: JAGGS - SEXRG-16005] ECTS [PREMA: JAGGS - SEXRG-16005]	EAST. [LSJ.* EPST. [LSJ.* EPST. [LAJ.* EPST. [CAS-167] ** ESSE. [CAS-167] ** ESSE. [CAS-10] ** ESSE. [SA.70] ** ESSE [SA.70] ** ESSE [SA.70] ** ESSE [SA.70] ** CLOTALESTS [DATA-LSY] CLOTALESTS [DATA-LSY] CLETALESTS [DATA-LSA] CLETALESTS [DATA-LSA-167-178-178-178-178-178-178-178-178-178-17	EXST. [STA CAS : DORP] EXST. [AN ALL STATE : DORP] EXT. [AN ALL STATE : DORP : DORT : DORP :	-8
RAL	РСУ СОНИЙОМ	GENOB MOI - MOZ	GENOA MOI-MO2	SKGRP MOI-MOZ	SHAOP MOT-MO2	ICY	0 0	OM ROOS	
GENERAL			Ď	•				A C 4	11
* REPRESENTS "DON'T-CARE" ACTION				From A	<u> </u>	COMPUTER CONTROL COMPANY, INC. FRAINGRAM BASS / LOS ARGELES 44 CALIF DR. A, K, y, T, e, T DATE != DATE ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG. ENG.			

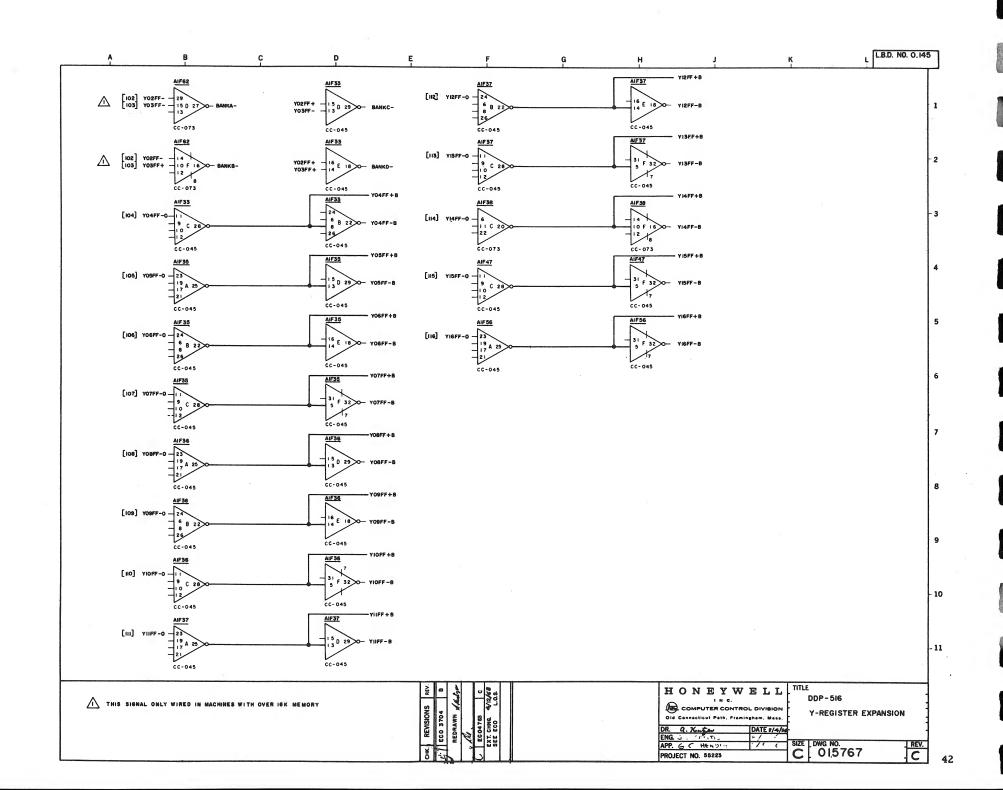


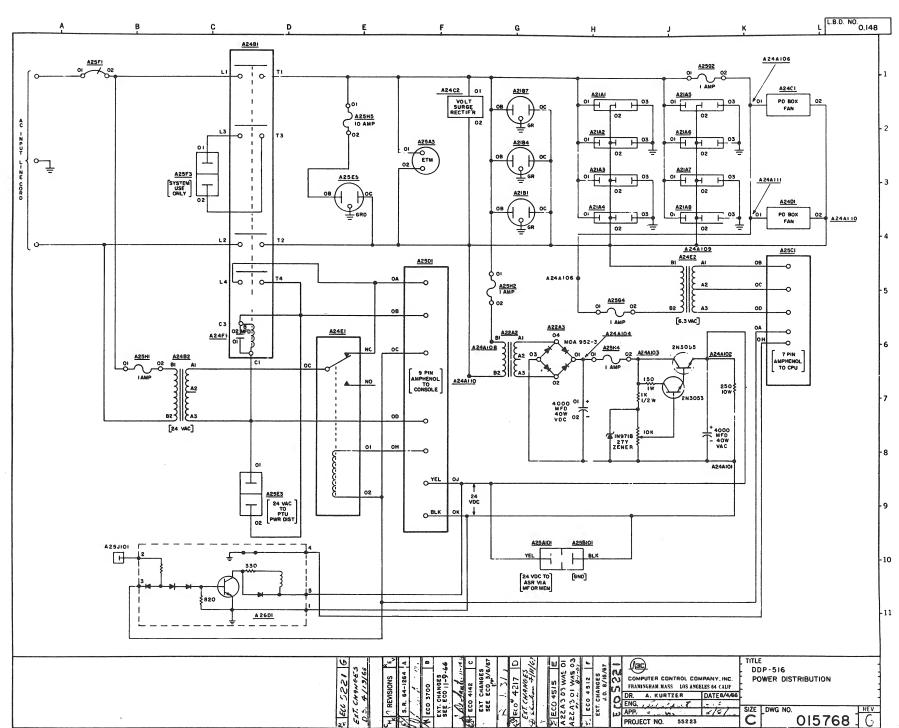


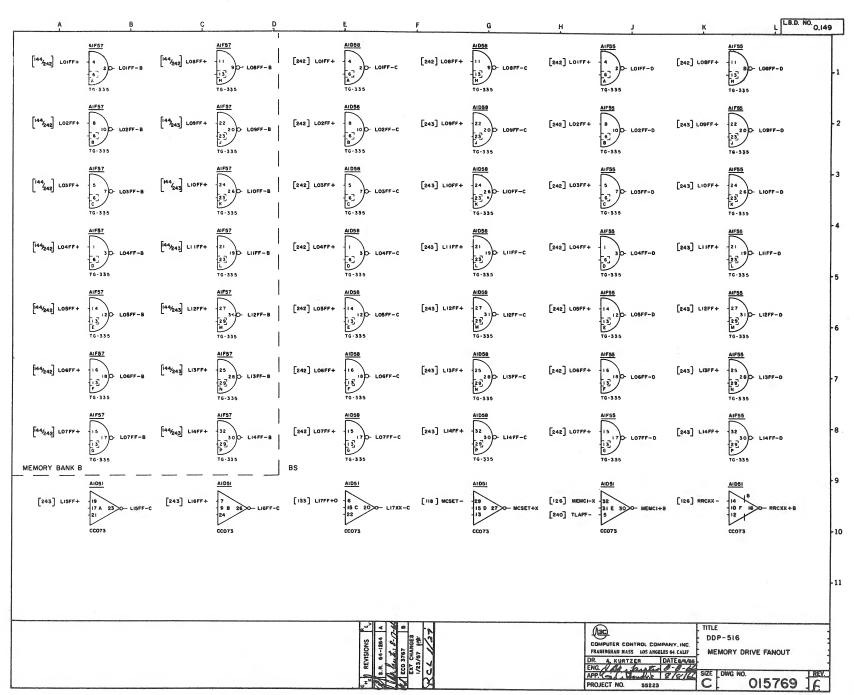


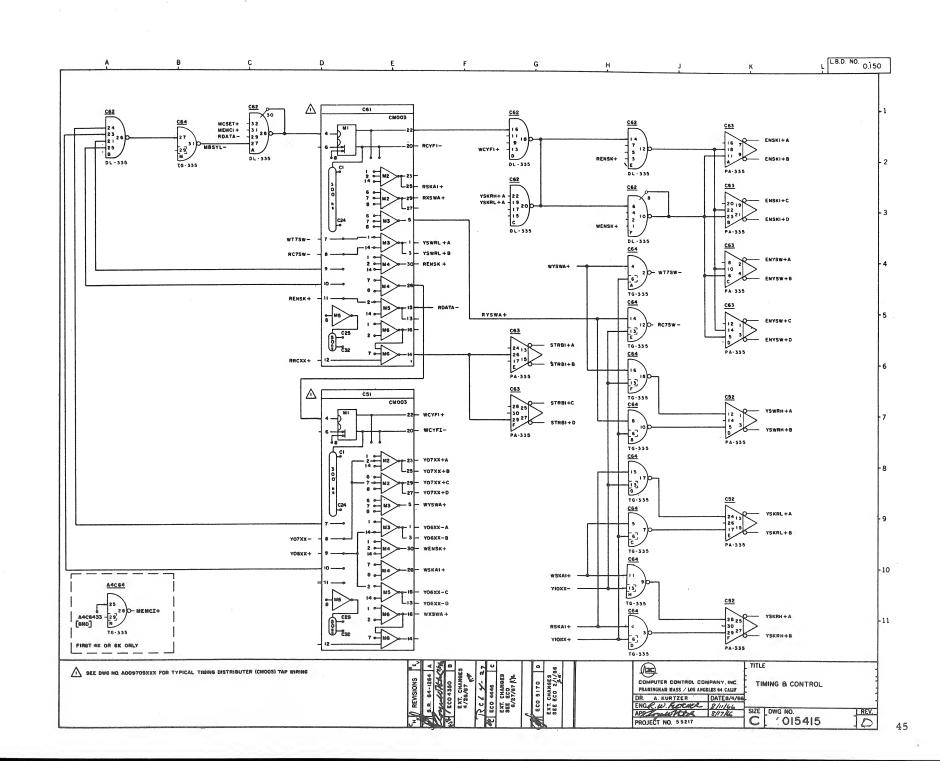


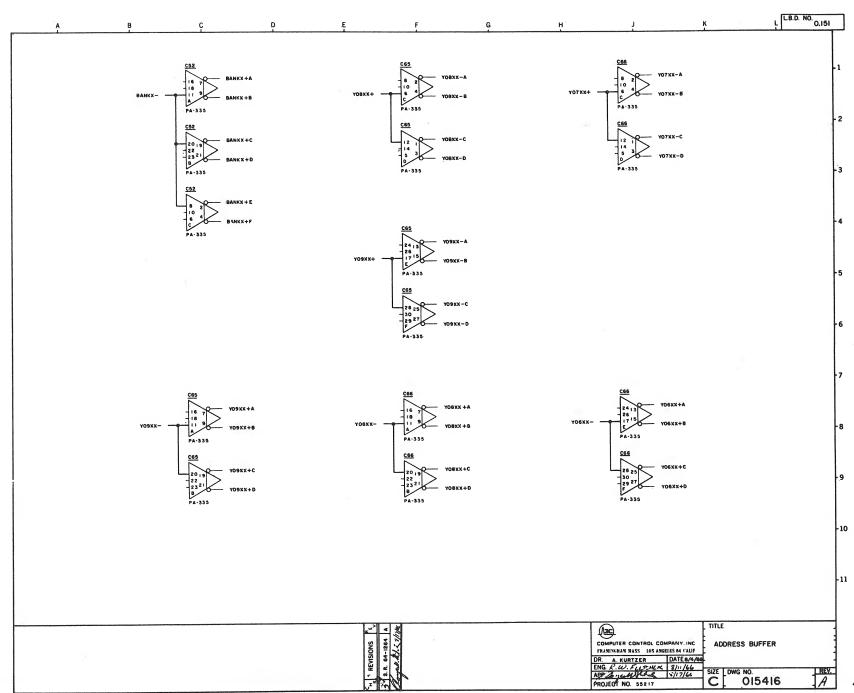


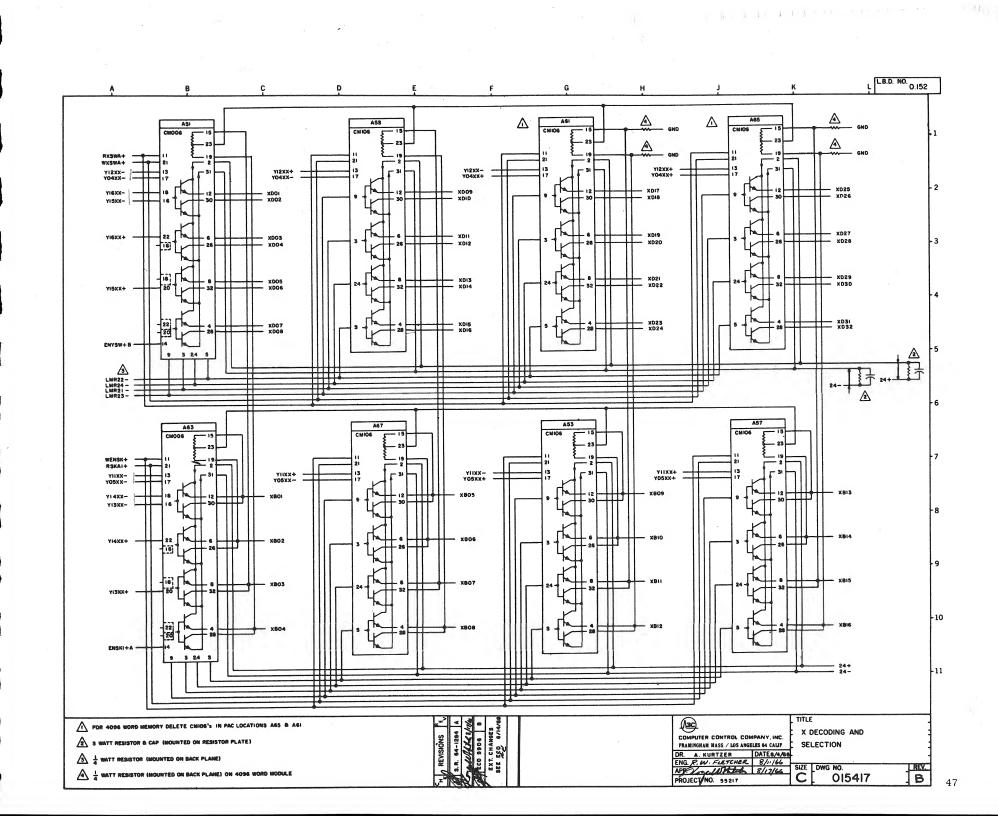


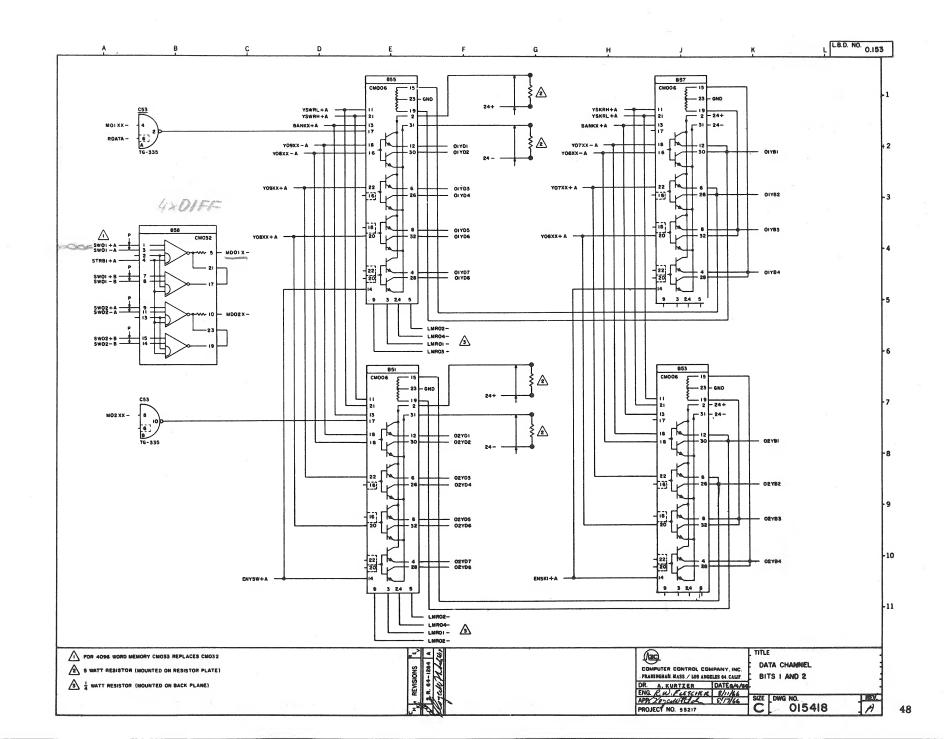


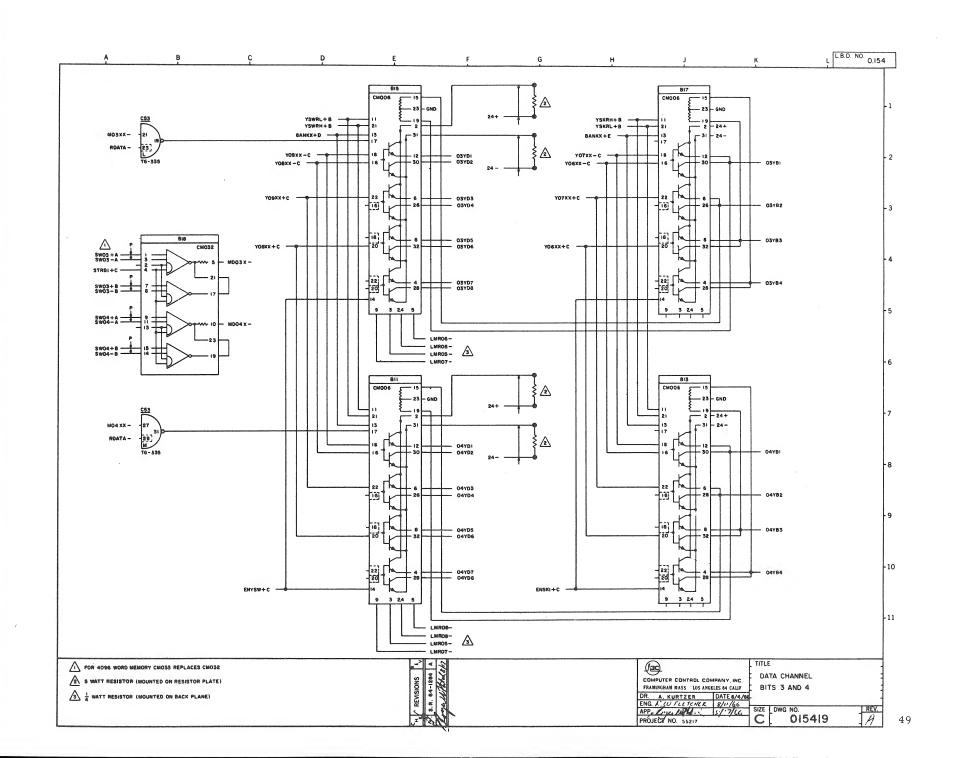


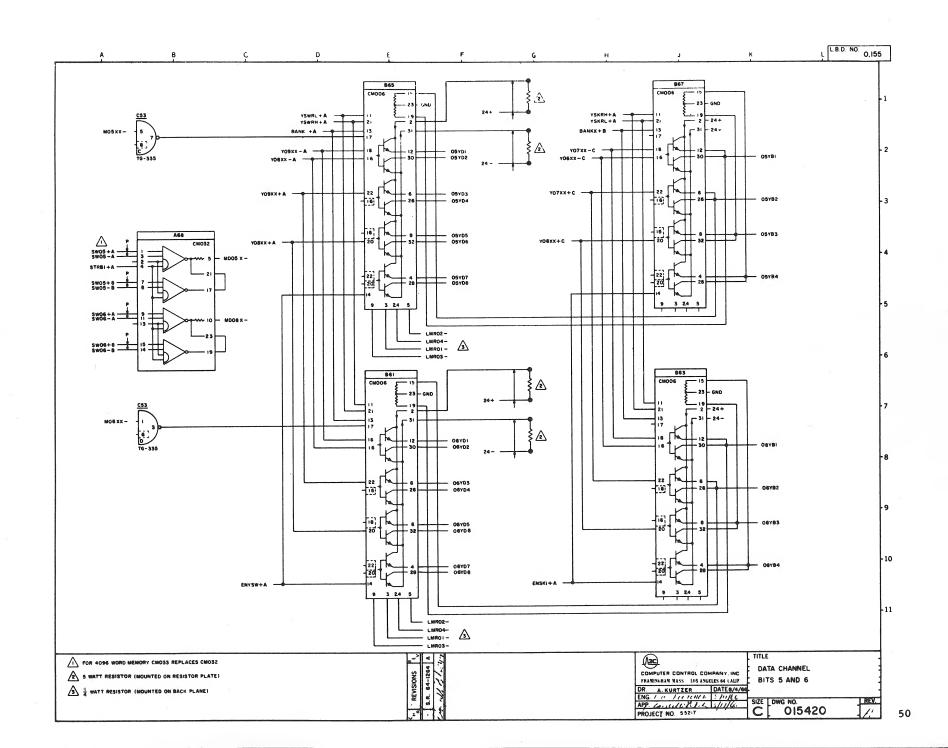


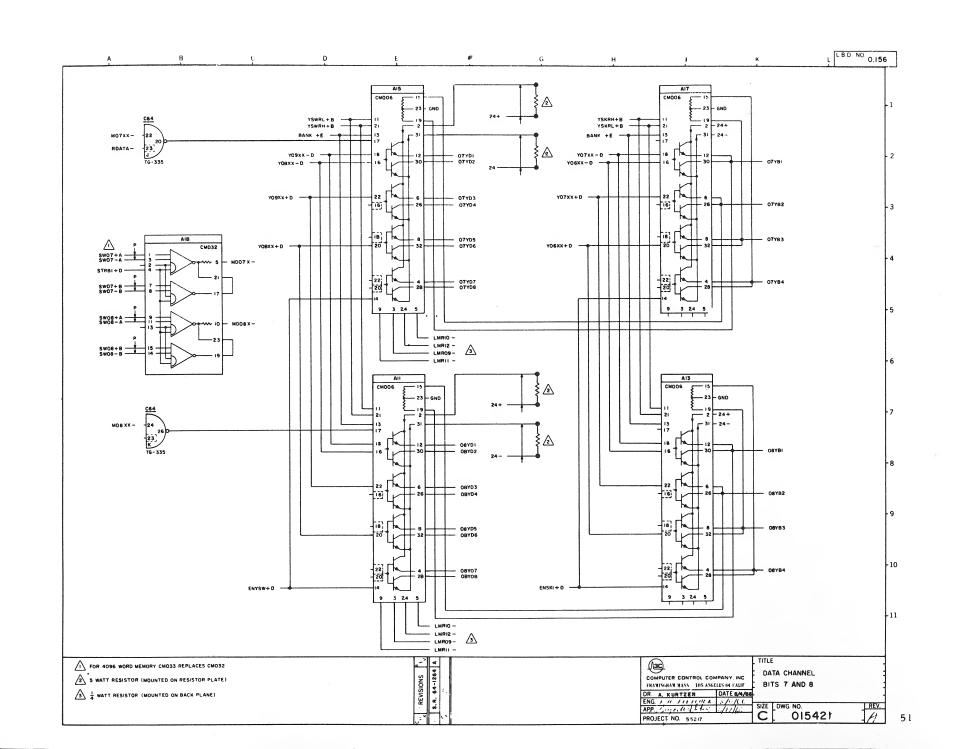


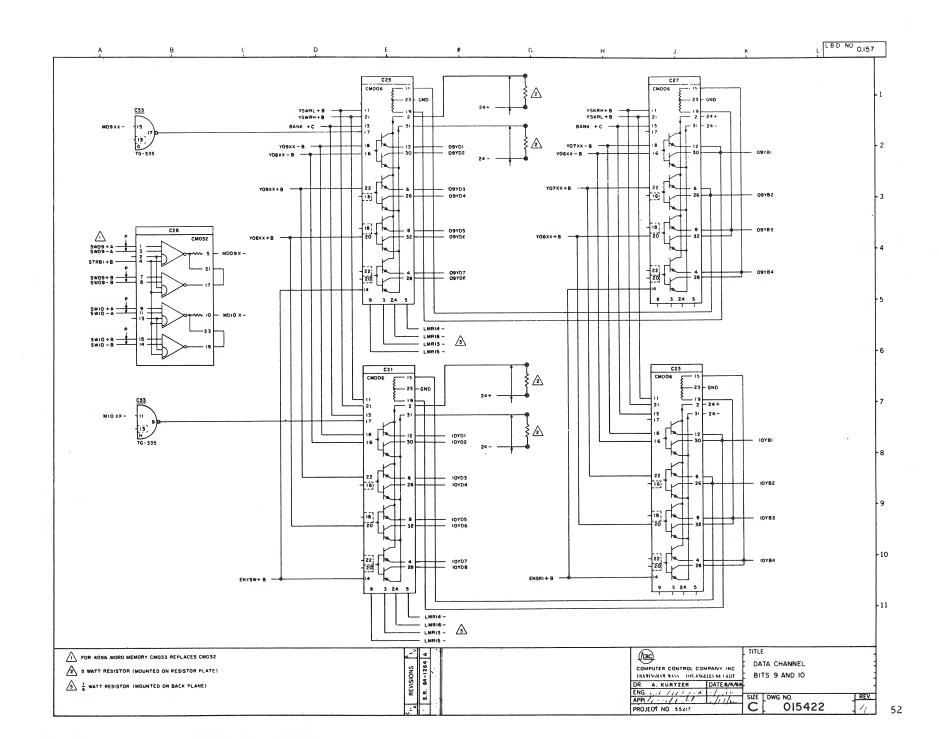


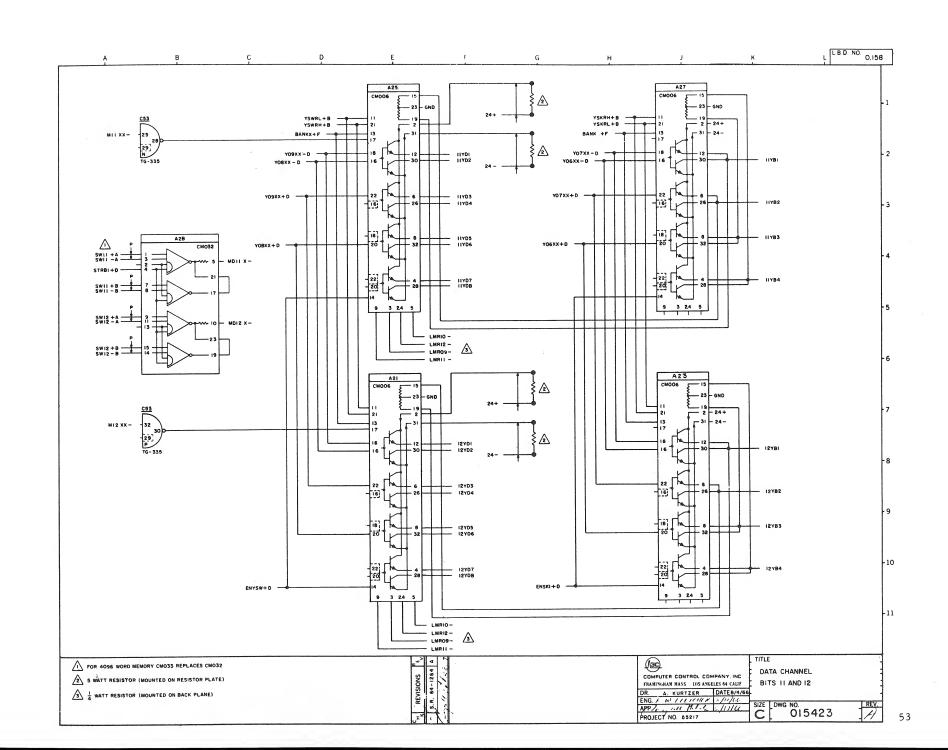


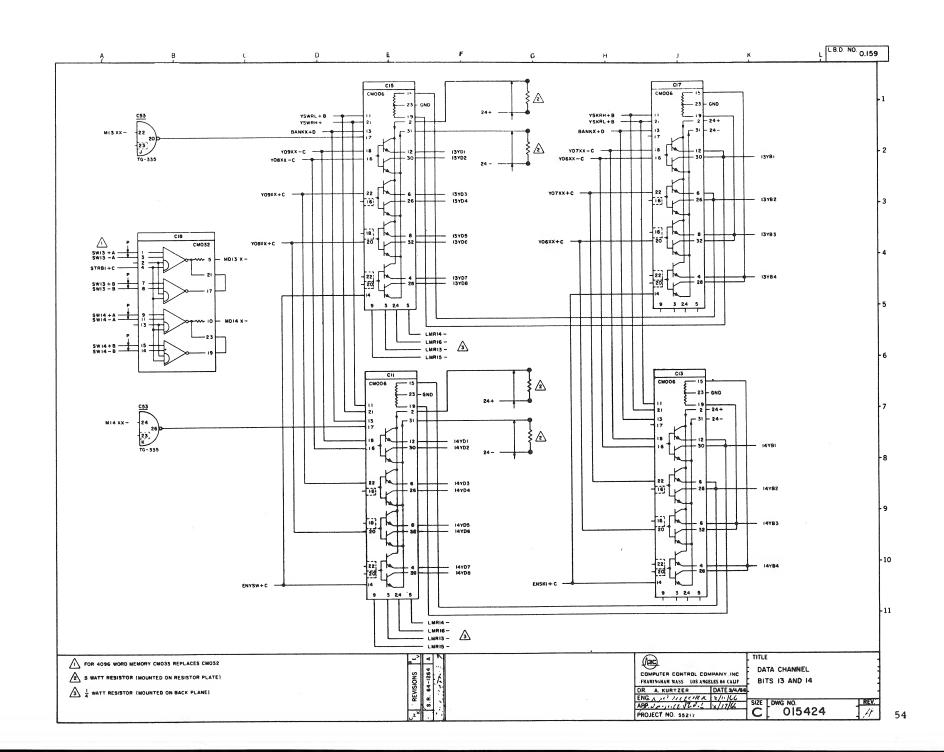


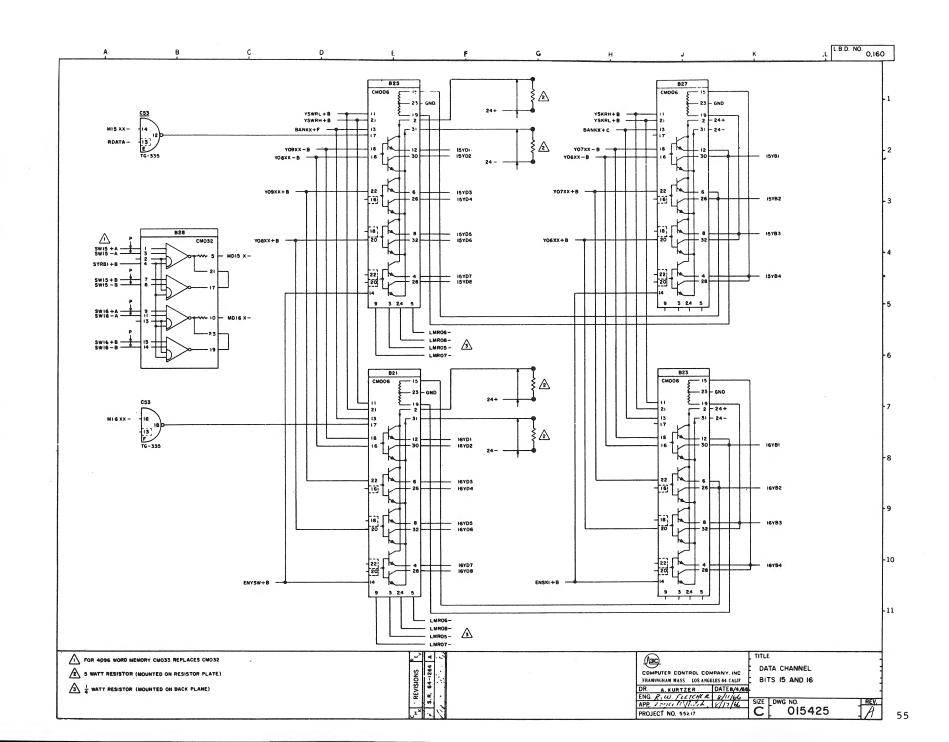


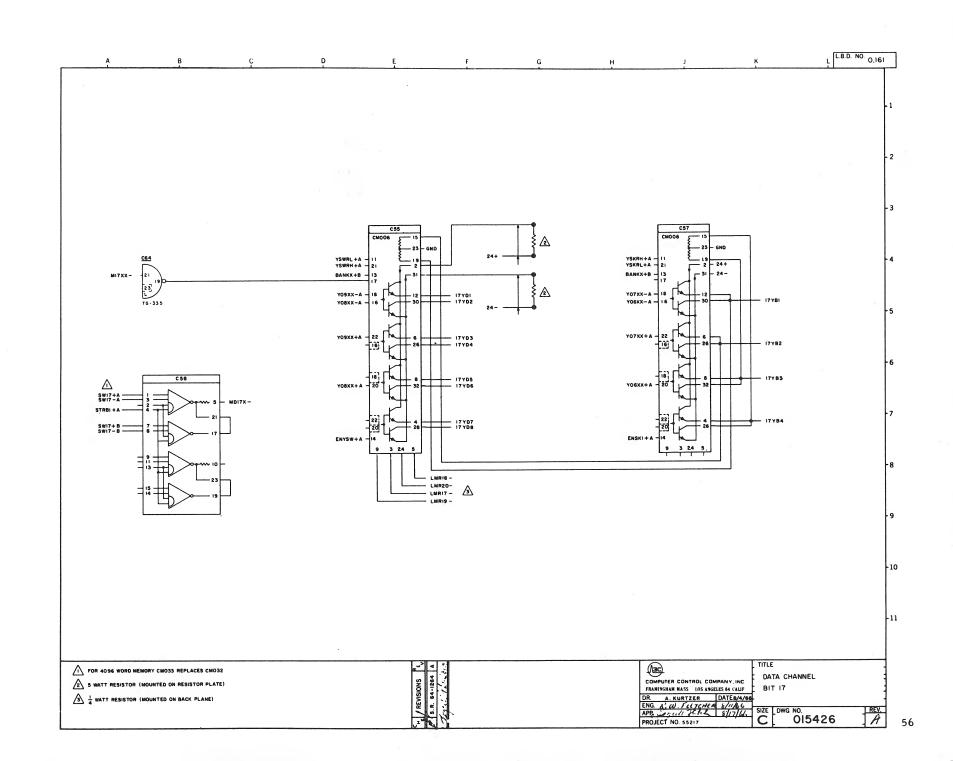


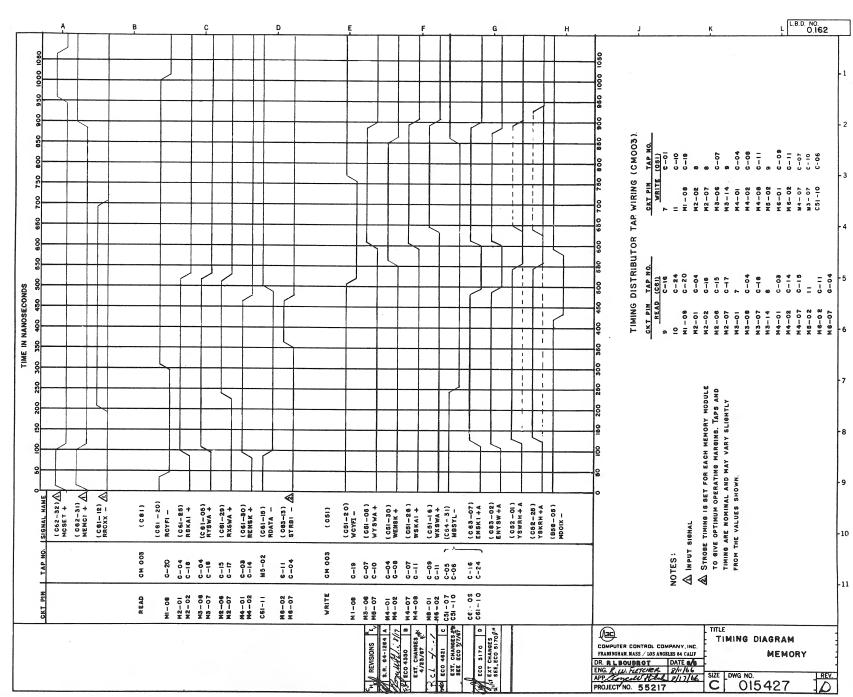


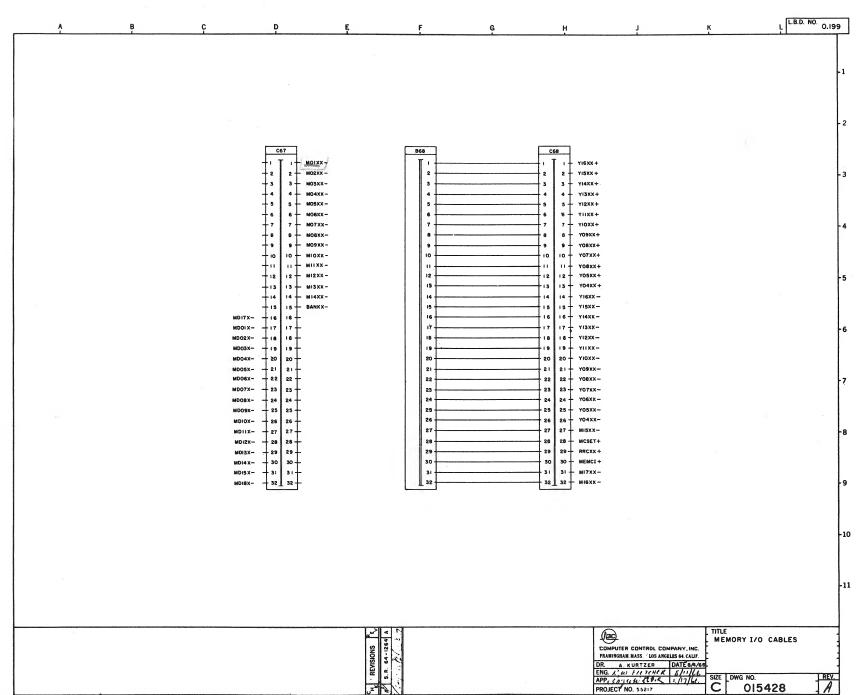


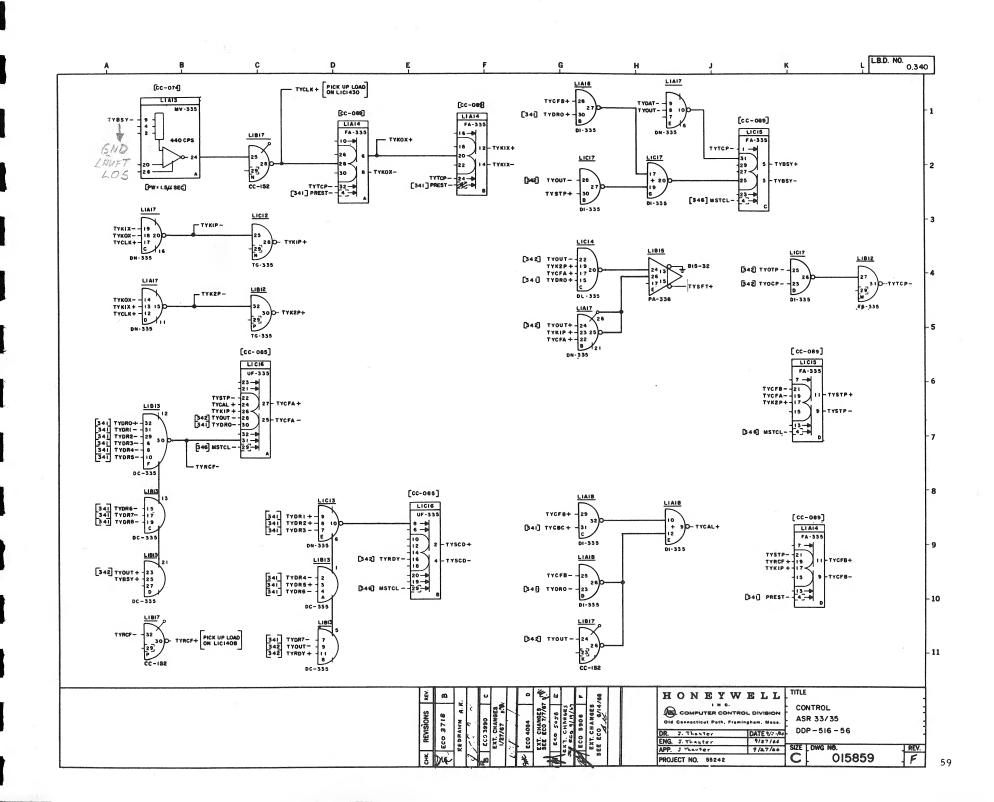


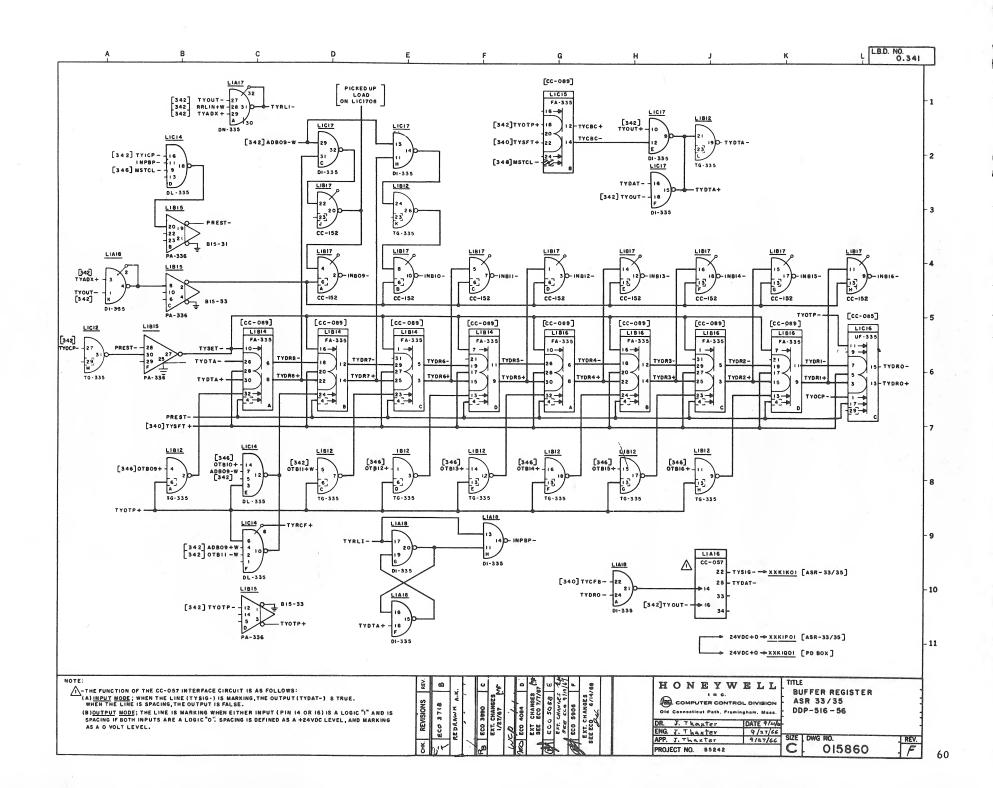


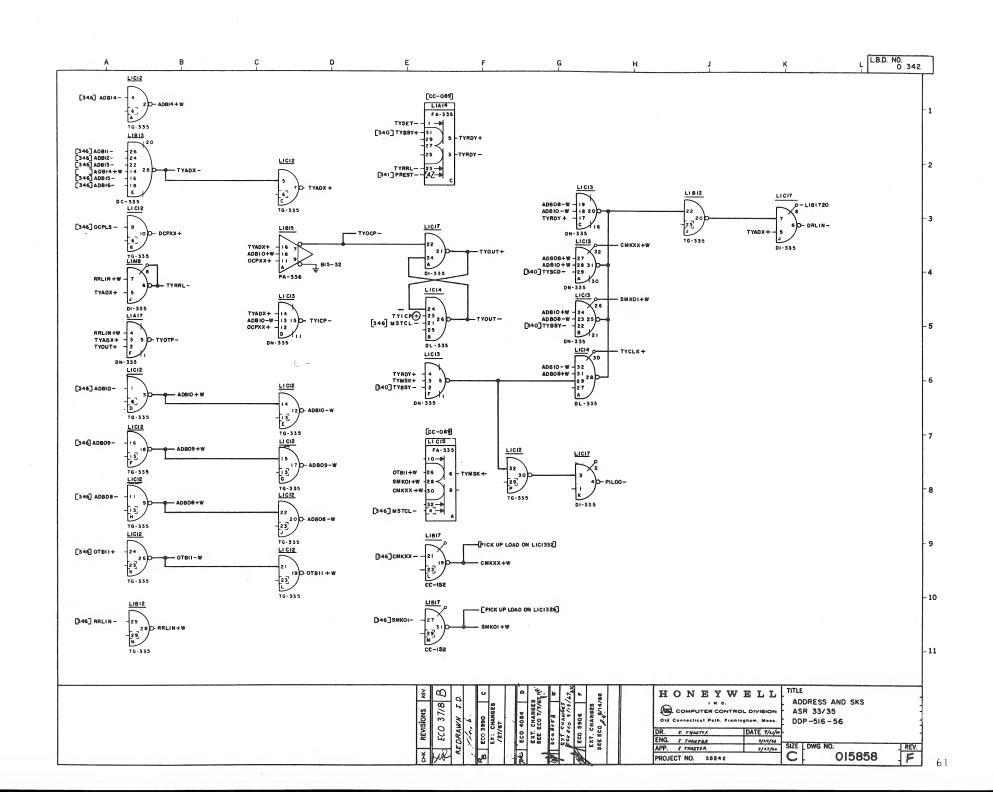


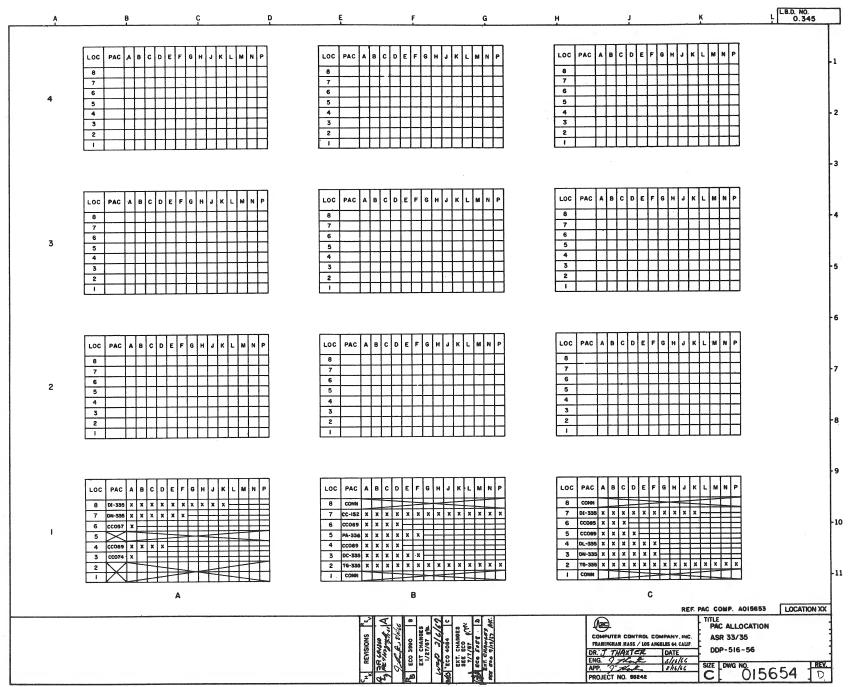


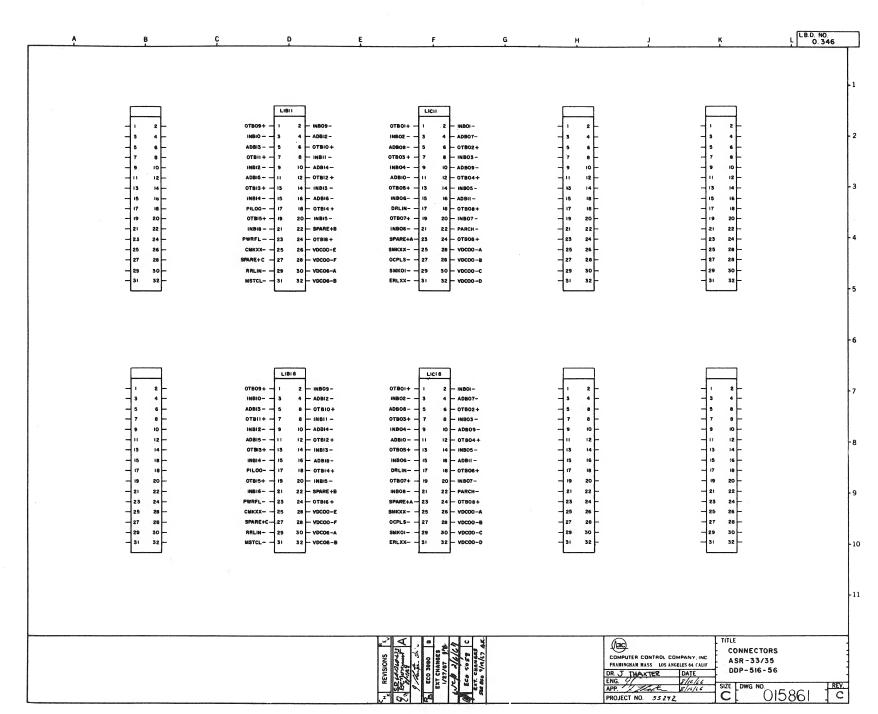


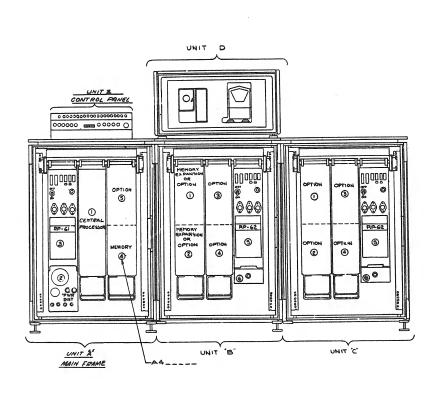












	REVISIONS			
REV	DESCRIPTION	DFTG	APP BY	DATE
С	PEDRAWN /ECO L-3467	БΜ	P	54
D	ADDED VEIW), CHTAWING AZGCIOI, SOZ OF SH S PER CCC 35 37 Ken Morros Wholes		B	17
E	EXTENSIVE CHG'S PER ECO 3643.) i C	2°C	1/
F	EXTENSIVE CHGS / ECO	1000	8	1/2/
G	EXTENSIVE CHC'S/ECO		03,	1/2
н	EXTENSIVE CHAS/ECO 3739.	15	Œ	17.
1	EXTENSIVE CHG'S/ECO 3862	12/5/64	10	1
J K	APP CI DES. TO SHEET 6/	FUE BU	fof	1/2
_	ADDED DIXECCE, DELETED	UBan	100	1
L	CE TOP VIEW SH. 8/ECO	5/14/67	100	
M	EXT CHG'S. PER ECO 4328 APT 6/20/67	18 1/5/47	: *	
N	EXT CHG'S PER ECO	1/20/2		
P	EXT CHE'S SHT 2 PER ECO 4263 SF 100	1/2/10		Γ
`R	SHT 3 CODING AZ6DI WAS AZ4DI & AZ6DIOS WAS AZ4DIOS PER ECO 4403 SF ~ F~ 49	96/2 767/2		
S	EXT CHG'S SHT 8 PER ECD 4645 AFF	4/7/67		Г
Т	EXT CHG'S SHT 24 B PER ECO 4468	16-9-17	مطعة أإدا	"/-/
U		12 6 67	SH.	12/4
	EXT. CHGS/	30E	-	

ALPHA SEQUENCE ABCDEFGHJKLMNPQRSTUVYE NUMERICAL SEQUENCE Ø123456789 UNIT AREA RONE ROW COL PIN

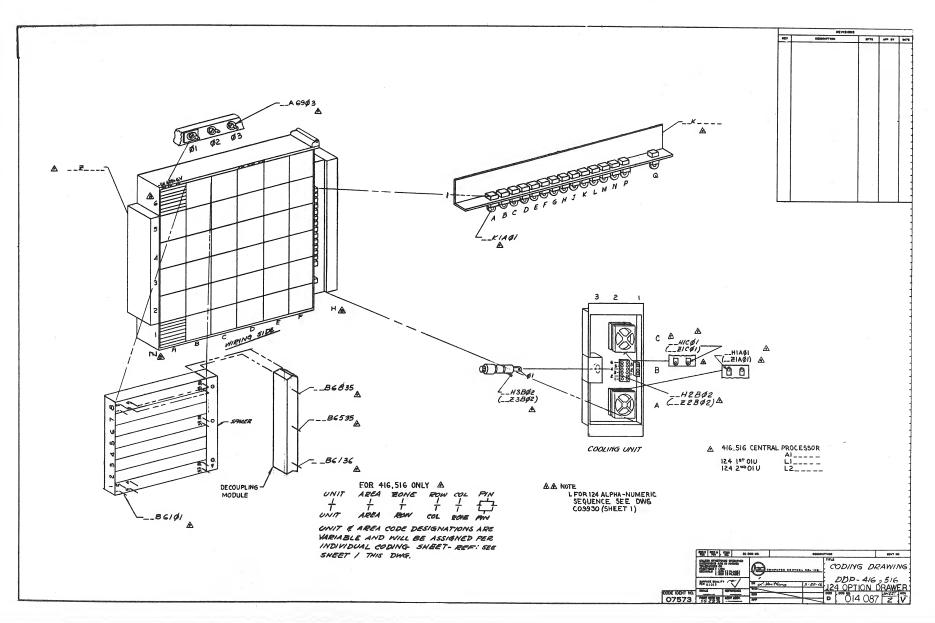
"X" INDICATES AN UNUSED DIGIT.

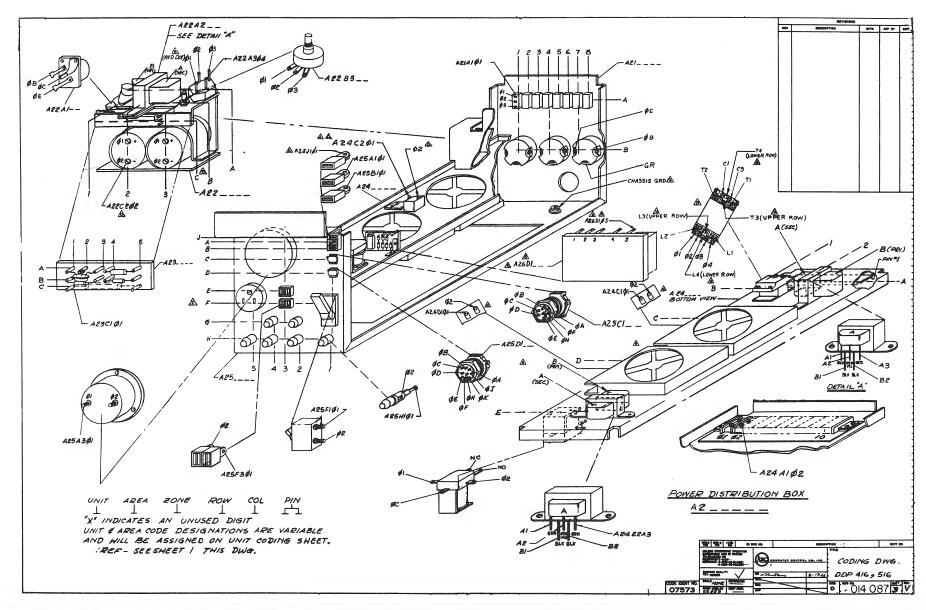
UNIT & AREA CODE DESIGNATIONS ARE VARIABLE

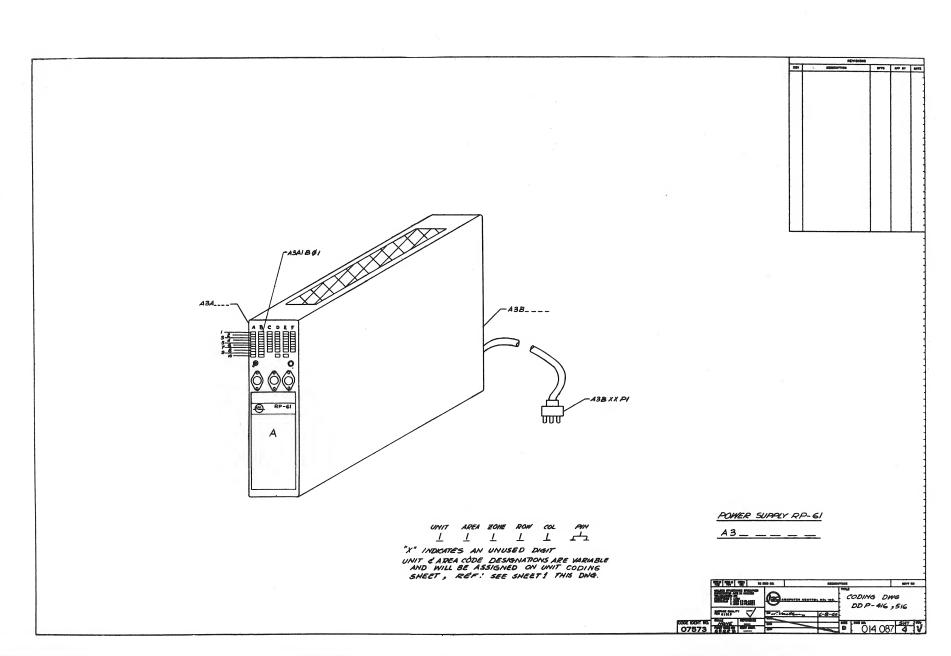
AND WILL BE ASSIGNED PER INDIVIDUAL UNIT

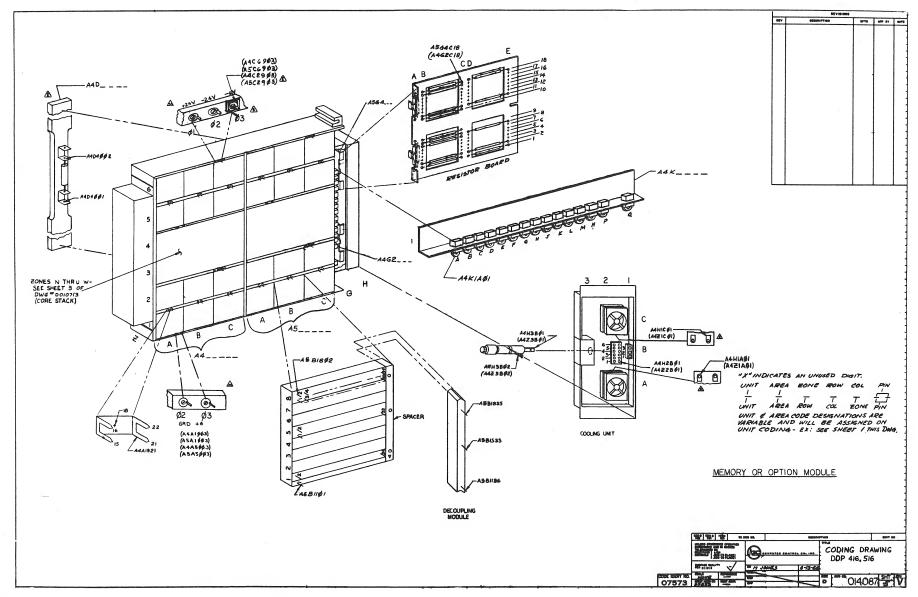
CODING SHEET

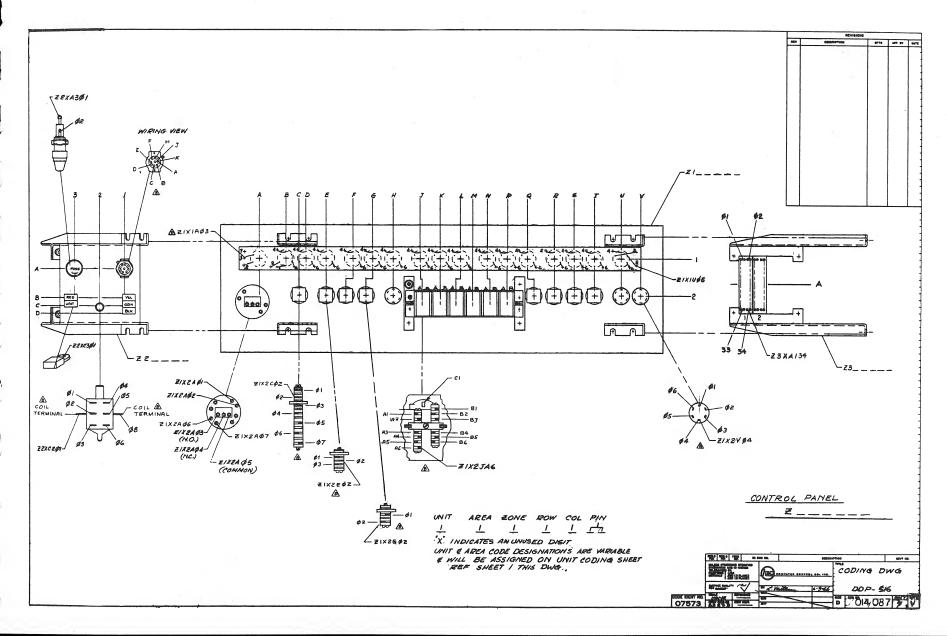
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	TO THE SE			DESCRI		COVT NO.
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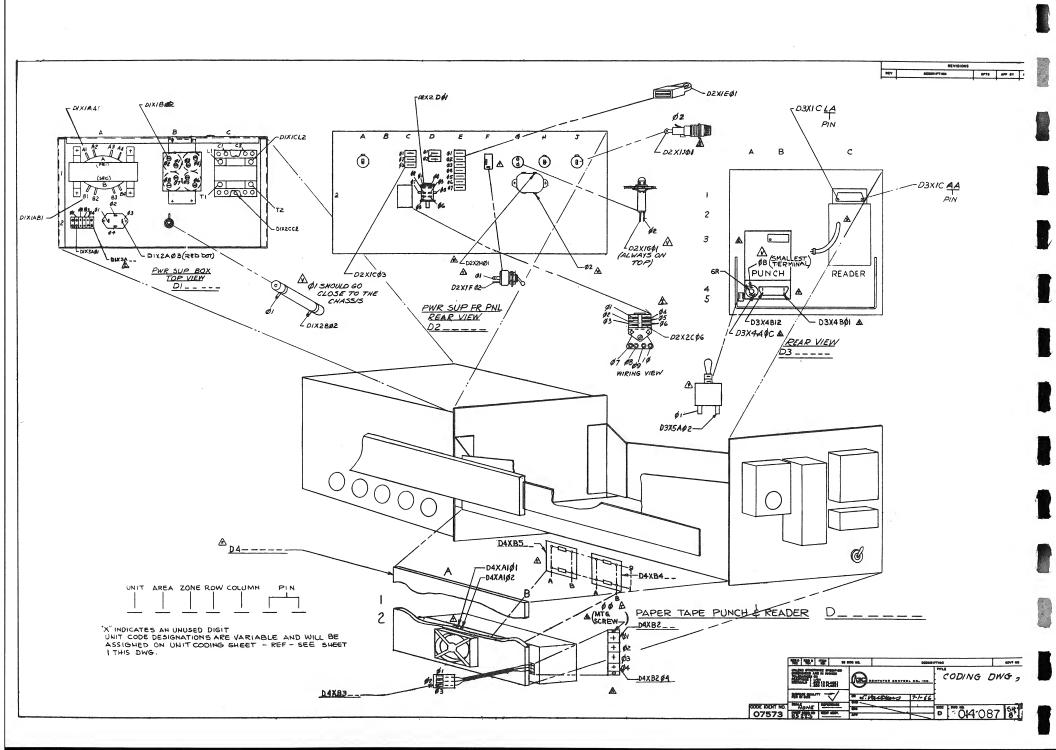


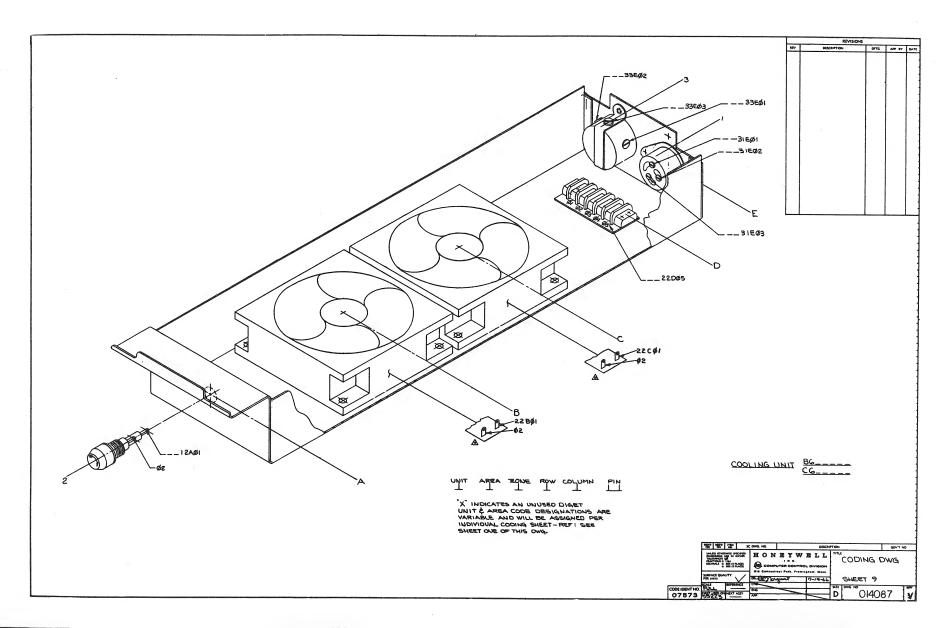


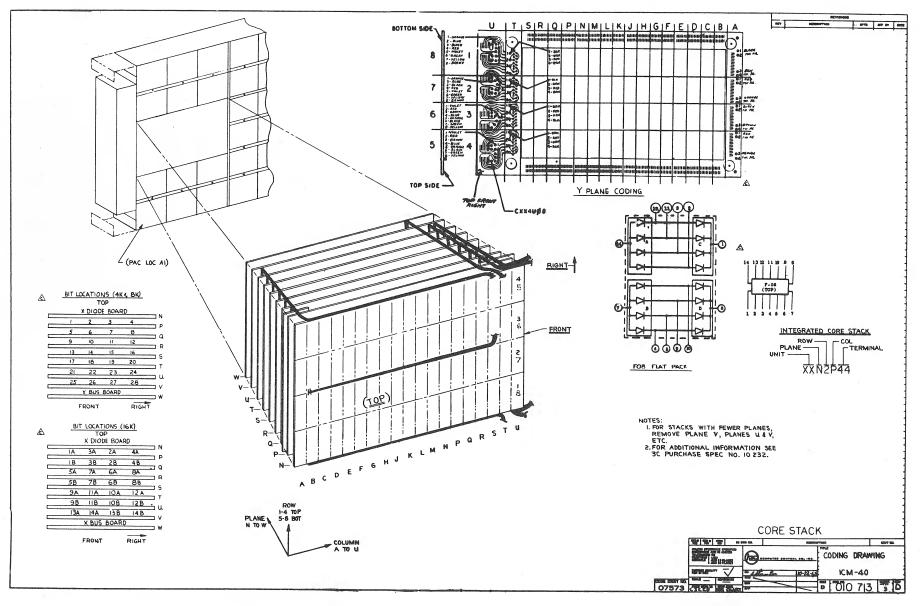


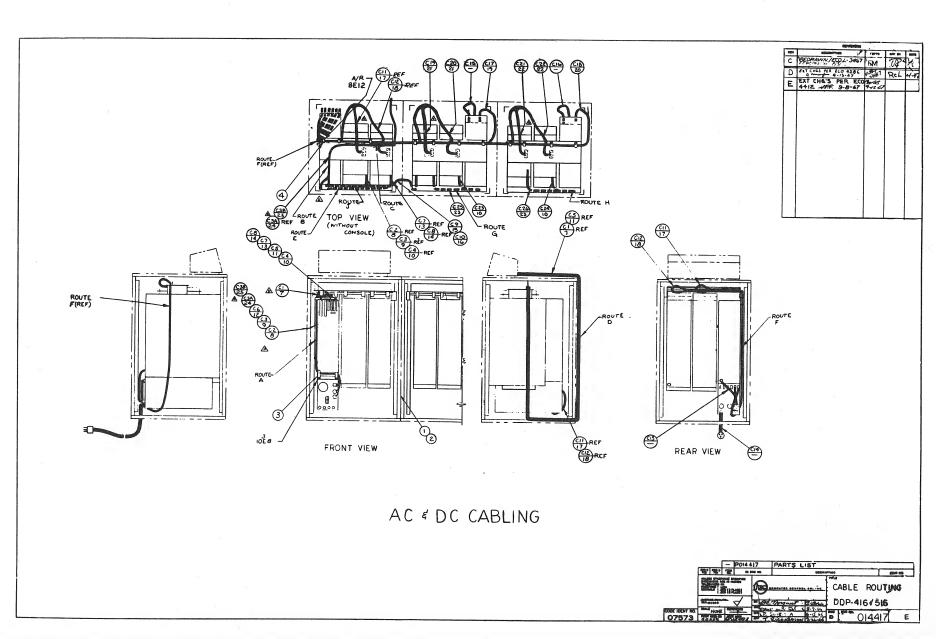


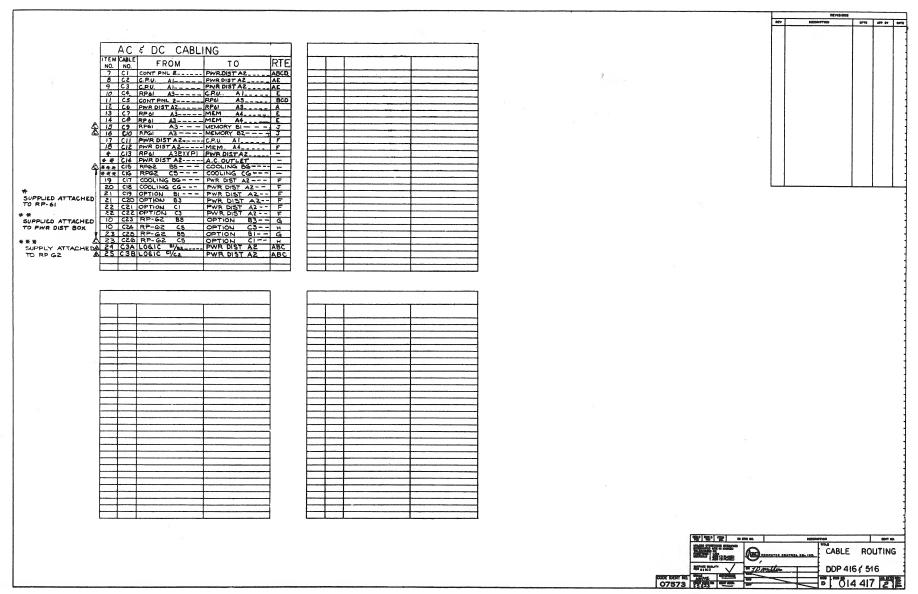


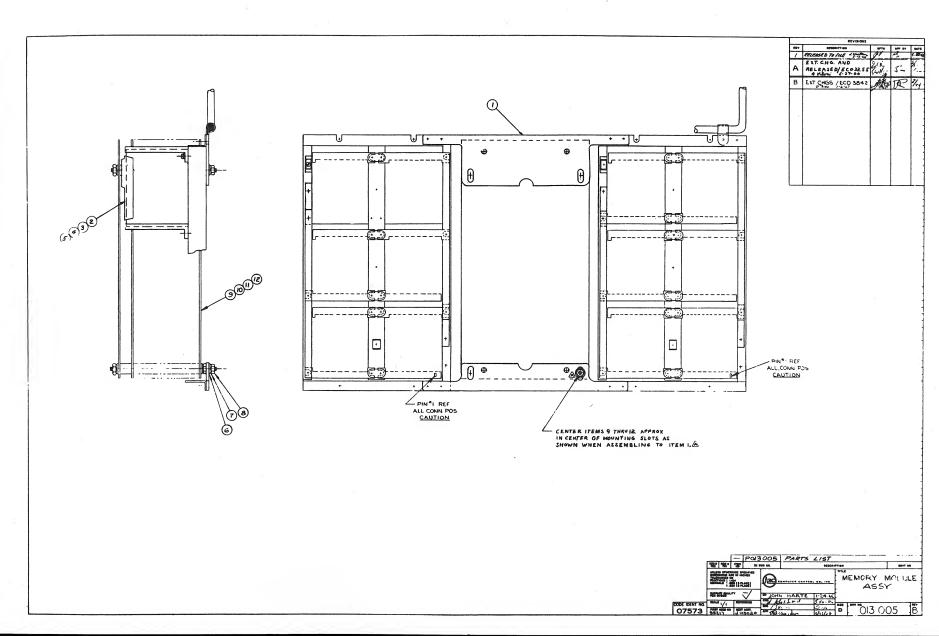


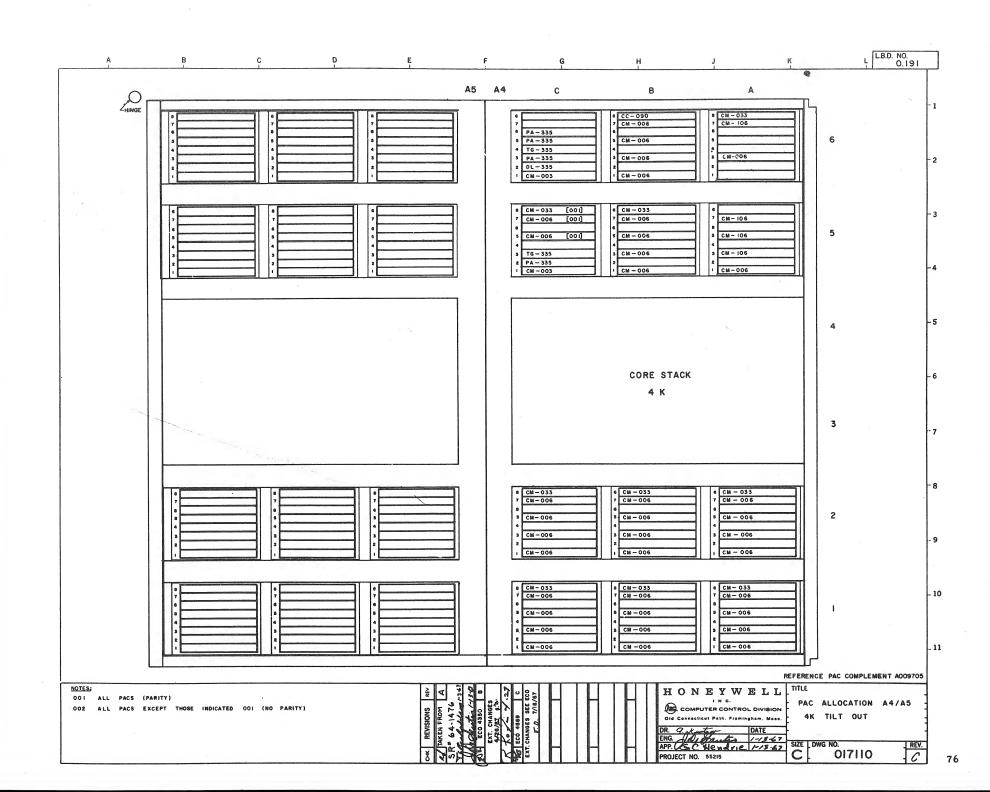


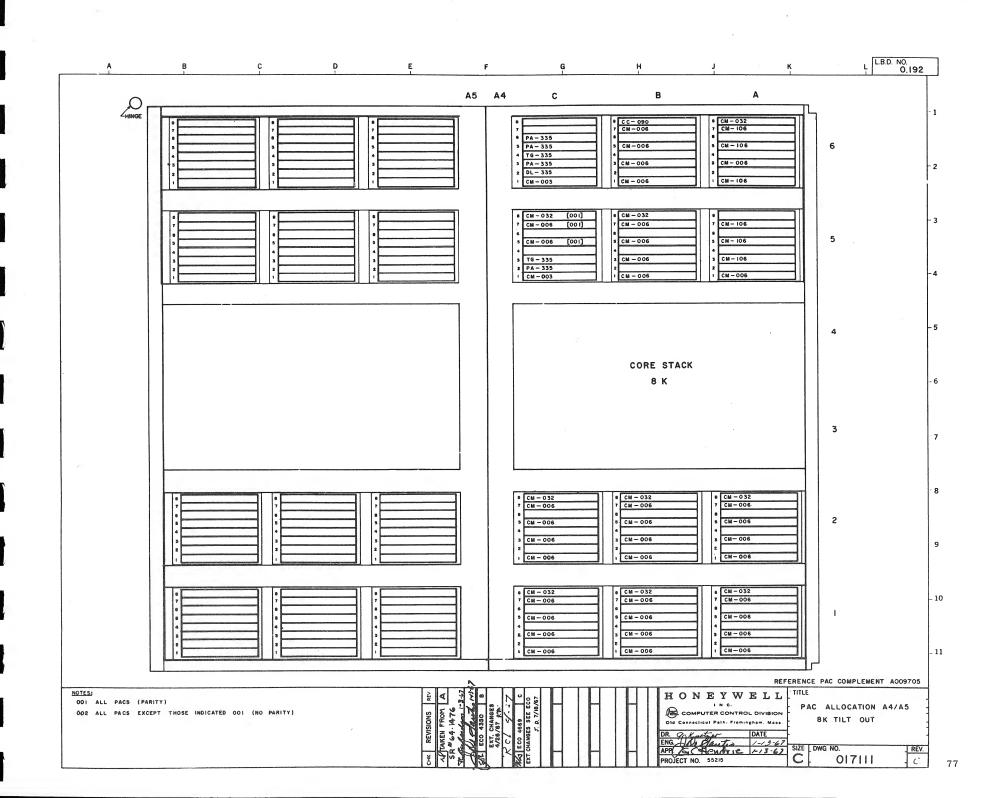


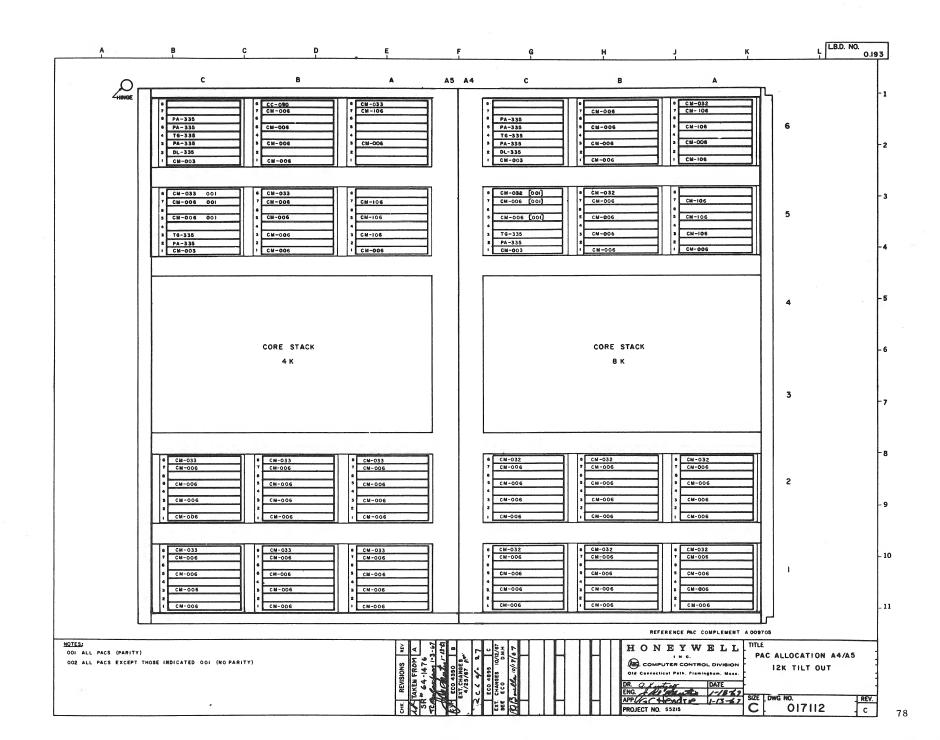


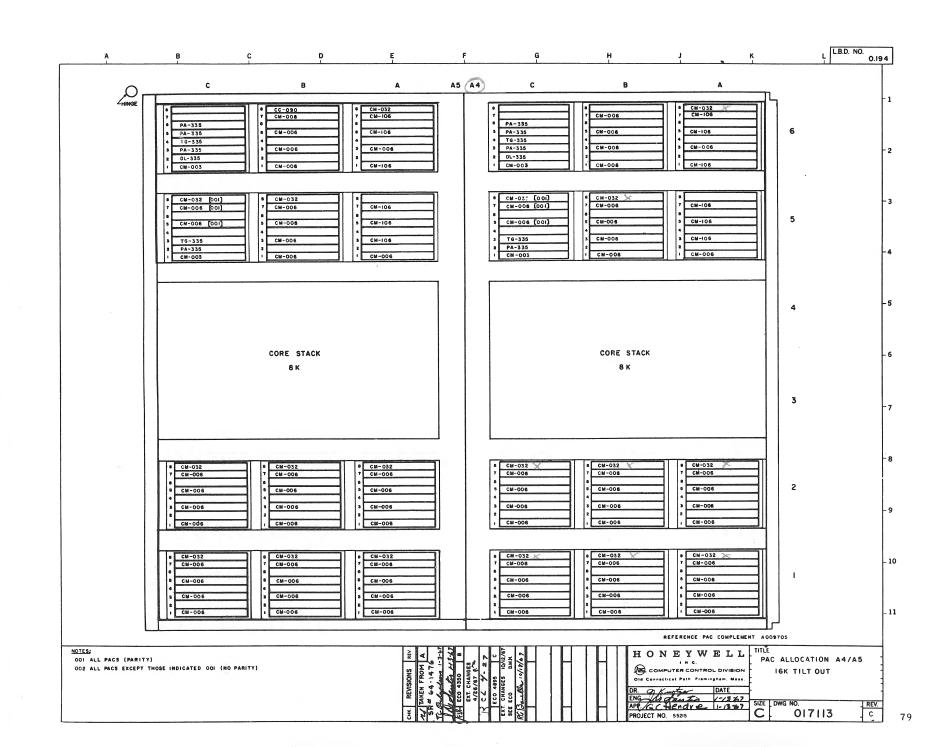


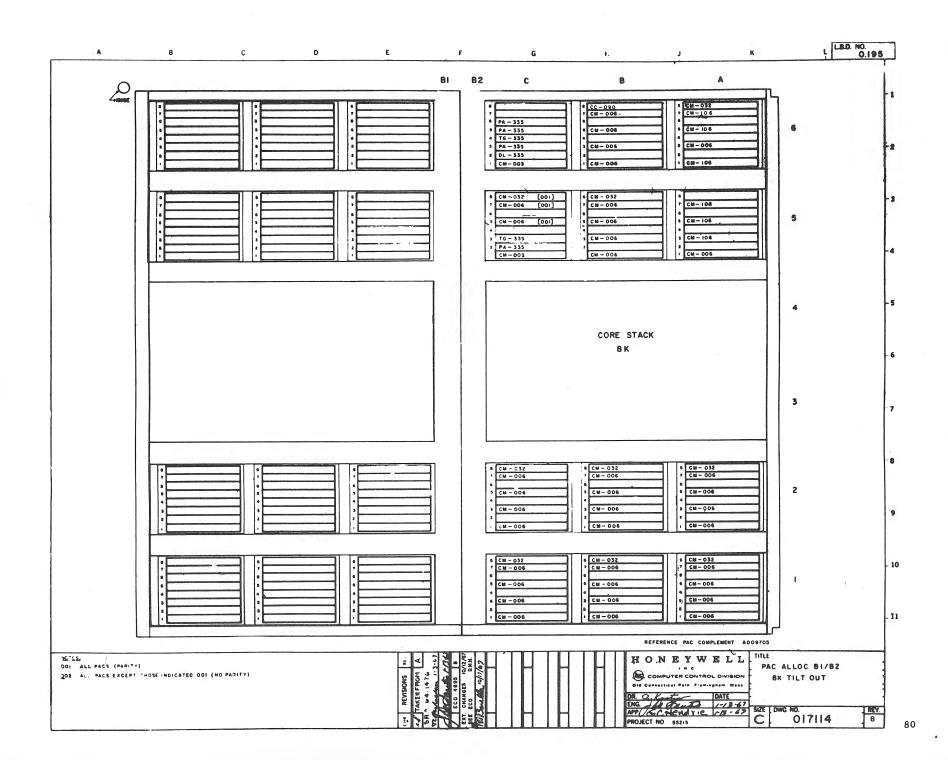


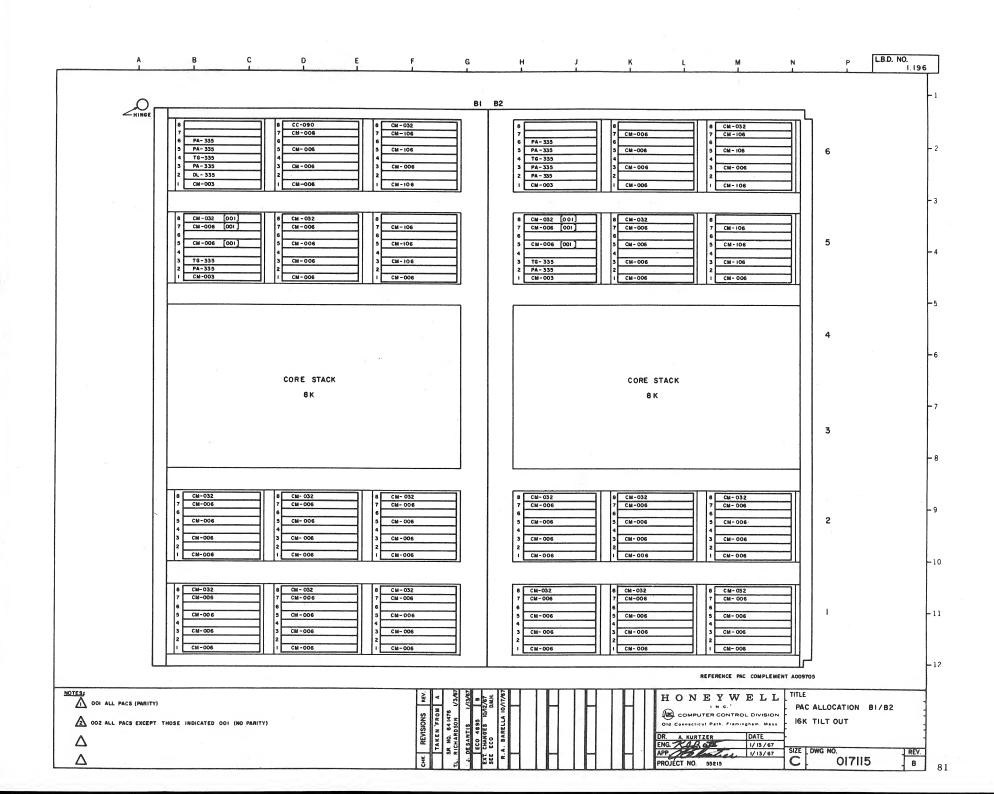


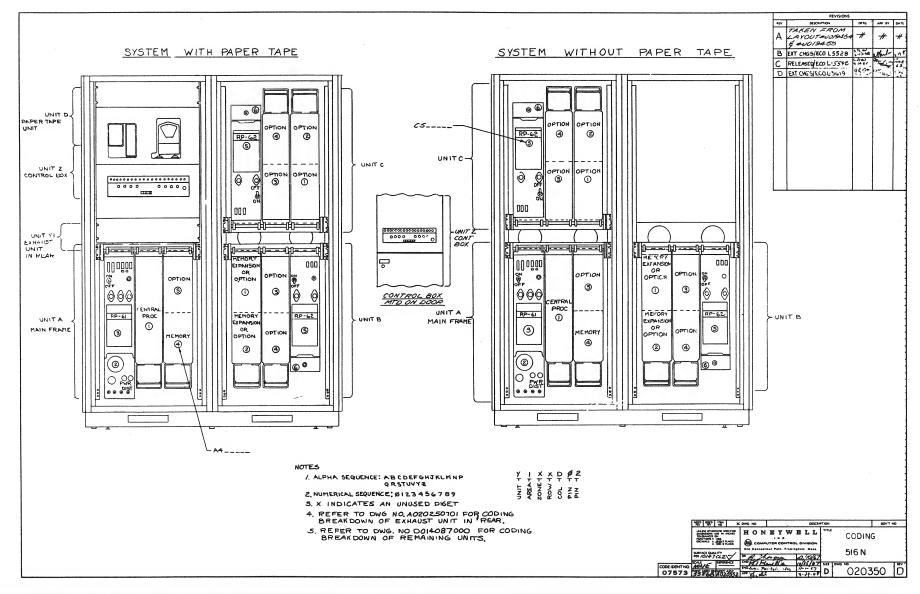












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